



# THE LAKES DISTRICT

NEIGHBOURHOOD PLAN

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NANOOSE BAY, BC  
FEBRUARY 2011



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## ACKNOWLEDGEMENTS

The Lakes District Neighbourhood Plan represents the collaborative efforts of many dedicated individuals and organizations over the course of a two-year comprehensive public planning process. The contributions of the following individuals towards the preparation of this Plan are gratefully recognized:

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REGIONAL DISTRICT OF NANAIMO BYLAW No. \_\_\_\_\_

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#### NEIGHBOURHOOD PLAN PUBLIC CONSULTATION PROCESS

- Summary Video – Community Collaboration and the Neighbourhood Plan

#### PUBLIC OPEN HOUSE NO. 1 - May 14, 2008

- Open House Summary

#### PUBLIC DESIGN WORKSHOP - Oct. 3, 2008

- Design Workshop Summary
- Video 1 – The Lakes District – Developing the Concept

#### PUBLIC OPEN HOUSE NO. 2 - Nov. 17, 2008

- Open House Summary

#### PUBLIC OPEN HOUSE NO. 3 - May 6, 2009

- Open House Summary
- Video 2 – Creating the Neighbourhood Plans
- Video 3 – Presenting the Neighbourhood Plans

## LIST OF ABBREVIATIONS

CAG	Community Advisory Group
DPA	Development Permit Area
LSV	Low Speed Vehicle
MoTI	Ministry of Transportation & Infrastructure
OCP	Nanose Bay Official Community Plan Bylaw No. 1400, 2005
RAR	Riparian Areas Regulation
RDN	Regional District of Nanaimo
RGS	Regional Growth Strategy
TIS	Traffic Impact Study
UCB	Urban Containment Boundary
UPH	[Dwelling] Units per Hectare

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# 1 OVERVIEW

## 1.1 EXECUTIVE SUMMARY

The Lakes District Neighbourhood Plan area is situated within the Regional District of Nanaimo (RDN) Nanoose Bay - Electoral Area 'E'. More specifically, the Plan area is located within the Fairwinds Urban Containment Boundary (UCB) as identified in the Nanoose Bay Official Community Plan. The Lakes District lands are framed by the existing Dolphin Beach neighbourhood to the north, the existing Fairwinds neighbourhood to the east, the Department of National Defence lands to the south, with rural and crown lands to the west. The Plan area encompasses approximately 287 hectares (see Figure No. 3 Nanoose Bay Context).

Preparation of the Lakes District Neighbourhood Plan took place over approximately twenty-four months, during which time the landowner, in consultation with the Regional District, undertook a comprehensive public planning process directed at engaging and documenting local participation in the drafting of the Plan. In consideration of the public comment received through open houses and design workshops, community advisory group meetings, and reviews by Regional District staff, the Lakes District Neighbourhood Plan seeks to integrate the existing local neighbourhoods to establish a more resilient, sustaining community for Nanoose Bay.

The Neighbourhood Plan addresses the complex issues of long-range planning for Nanoose Bay by providing a detailed framework for managing future growth of the remaining lands within the Fairwinds UCB. The Neighbourhood Plan responds to the long term needs of the region as identified in the Regional Growth Strategy (RGS)<sup>1</sup> as well as to the local community as outlined in the Nanoose Bay Official Community Plan (OCP)<sup>2</sup>.

The Lakes District Neighbourhood Plan is based on an in-depth review of regional planning directions; a detailed understanding of the land's physical constraints and opportunities; best management practices (BMPs) for environmental management, sustainable community planning and design; and, consideration of community values through an extended public consultation process.

The Plan provides for the phased development of a sustainable neighbourhood of diverse housing forms structured around a network of regionally significant parks. Comprised of a maximum of 1,675 single dwelling and multi-dwelling residential units (representing the remaining balance of the 2,500 dwelling units permitted in the OCP for the Fairwinds Urban Containment Boundary), the Plan provides a Lakehouse Centre as a community focal point on Enos Lake, with parks within a 5-minute walk of each home accessed by a multi-modal, pedestrian-friendly transportation network of traffic-calmed streets, tree-lined pathways, and forest trails.

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<sup>1</sup> "Regional Growth Strategy" or "RGS" refers to the "Regional District of Nanaimo Regional Growth Strategy, Bylaw No. 1309, 2002."

<sup>2</sup> "Official Community Plan" or "OCP" refers to the "Regional District of Nanaimo Nanoose Bay Official Community Plan, Bylaw No. 1400, 2005."

## 1.2 RATIONALE FOR THE NEIGHBOURHOOD PLAN

The Lakes District Neighbourhood Plan was initiated as a means to update the 1983 Master Plan for Fairwinds in a manner more consistent with present values, standards of efficient land use, and RDN goals, objectives and policies. In essence, the Lakes District Neighbourhood Plan acknowledges the historical significance of initial settlements on the Nanoose Peninsula and, through the consideration of best practices in neighbourhood design as well as consultation with the local community, establishes an updated plan for the future, reflective of community values, and Regional District policies.

## 1.3 FRAMEWORK FOR MANAGING CHANGE

The Lakes District Neighbourhood Plan structures land use and servicing decisions to effectively manage growth with the intent of building a healthy, more complete and sustainable urban neighbourhood. The Neighbourhood Plan provides greater detail concerning the planning and engineering required to assist in the reconciliation of land use, environment, density, infrastructure and implementation issues, serving as a comprehensive guide for managing future rezoning and subdivision applications.

In establishing an up-dated comprehensive plan for the Lakes District, the Neighbourhood Plan will amend the Nanoose Bay OCP and establish greater alignment with the goals and objectives of the RDN Regional Growth Strategy (RGS). The RGS provides overarching direction with respect to managing growth in the region. Through encouraging new development within designated urban areas (Urban Containment Boundaries), settlement is more compact, socially supportive, and land-efficient. This in turn serves to maintain the integrity of rural and resource areas, protect the environment, reduce greenhouse gas emissions, increase infrastructure efficiency, and foster healthy, diverse communities. Within Nanoose Bay, the Lakes District is located within the Fairwinds Urban Containment Boundary. The boundary identifies where future growth is expected and encouraged as a means to reduce sprawl elsewhere and to build complete communities.

The Lakes District Neighbourhood Plan aims to set a new standard for neighbourhood planning, public consultation, and complete community development within the RDN. Through implementing the objectives and policies found within the OCP and RGS, the Neighbourhood Plan serves to bring greater resolution to the RDN vision for a sustainable region.

## 1.4 RELATIONSHIP TO THE REGIONAL GROWTH STRATEGY AND OFFICIAL COMMUNITY PLAN

The Regional District of Nanaimo Regional Growth Strategy Bylaw No. 1309 (2002) sets policy direction in response to concerns regarding cross-jurisdictional impacts of growth in the region and represents a direct effort by the RDN to focus *“the majority of new development ... in designated urban areas where mixed uses would prevail”*<sup>3</sup>. A sustainable future for the Lakes District will mean planning for growth in a manner consistent with the RGS at the neighbourhood level.

The RGS reflects clear intent to *“encourage investment and development in designated urban areas, in order to keep urban settlement compact, protect the integrity of rural and*

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<sup>3</sup> Regional District of Nanaimo Regional Growth Strategy Bylaw No. 1309, 2002, p. 5

*resource areas, protect the environment, increase servicing efficiency, and retain mobility within the region.”<sup>4</sup>*

With respect to the Lakes District Neighbourhood Plan, the RGS provides policy direction for the creation of Urban Containment Boundaries and articulates high-level goals, which are reflected in the Nanoose Bay OCP.

The Nanoose Bay Official Community Plan Bylaw No. 1400, 2005 responds to regional growth strategy objectives generally through the designation of the Lakes District lands as an urban area within an Urban Containment Boundary. However, more specific consideration of appropriate, sustainable land uses – including a balance of residential density, housing choice, open spaces and community amenities – requires more detailed understanding and collaboration with the landowner, technical consultants and community members at the scale of neighbourhood planning.

#### **1.4.1 Nanoose Bay OCP and Regional Growth Strategy**

Section IV of the OCP translates the goals and objectives of the Regional Growth Strategy into OCP-level objectives and policies, as a means to align land use and development in Nanoose Bay with the vision for the region. Central to the vision is the strengthening of the identified Neighbourhood Centres and Urban Containment Boundaries (UCB).

The Lakes District Neighbourhood Plan area lies within the Fairwinds UCB, which establishes a definite border between urban land uses and the remainder of Nanoose Bay.<sup>5</sup> The OCP further provides for “nodal development” through identification of a Fairwinds Neighbourhood Centre within the Lakes District.

The OCP then requires development and preparation of more detailed Neighbourhood Plans for areas identified as future growth areas, containing significant land uses and population growth. Neighbourhood Plans are an important step in the development process as a means to undertake technical investigations of the Plan area to inform physical planning; engage local stakeholders in meaningful consultation in order to better adapt future development to reflect local values and needs; and give greater resolution to broad policy directives within the RGS and OCP as applied to the Plan area.

The end result is a Neighbourhood Plan which reflects community goals and relevant OCP objectives and policies, while effectively bringing greater resolution to the OCP and alignment with RGS objectives.

#### **1.4.2 The Nanoose Bay OCP Land Use Policies**

Policy directives within the OCP require the provision of a diversity of land uses and housing types; creating opportunities for recreation; phasing development in over time; and the protection of significant environmental areas.

*“It is intended that the communities develop from collaboration with the local community to determine the size, scale and design of these nodes, with an appropriate scale and range of retail, residential, employment opportunities, public amenities and travel alternatives. It is noted that throughout the public process,*

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<sup>4</sup> Regional District of Nanaimo Regional Growth Strategy Bylaw No. 1309, 2002, p. 1

<sup>5</sup> Nanoose Bay Official Community Plan Bylaw No. 1400, 2005, Section 1.4, p.7

*citizens supported focusing attractive, planned future development in... the Area's Neighbourhood Centres.”<sup>6</sup>*

The OCP also speaks to the general scale, form and character of development within the Lakes District:

*“It is anticipated that the build out of the area includes 2500 residential units. The siting and development of this housing should respect the natural features of the area but it is recognized that in order to accommodate this level of development, innovative and non-traditional forms of housing and services may be introduced. The scale and design of new development will also need to be oriented toward an attractive public realm or focal point that includes a significant park or open space feature with an integrated system of pedestrian connections or trails.”*

Beyond these broad policy directives, the Nanoose Bay OCP outlines a number of specific policies to further support and provide policy direction for these objectives. Whereas the Nanoose Bay OCP details policies in both neighbourhood-specific and thematic sections, the following set of seven policy areas has been defined to consolidate existing policies and inform the development of the Neighbourhood Plan. These are:

A) **Residential Choice** – *to establish a range of residential land uses and densities;*

The OCP encourages affordability, liveability and complete communities. Specific aspects of the OCP related directly to Residential Choice include options for residential unit type, size and density serving a broader scope of needs.

B) **Neighbourhood Mixed Use** – *to provide for the long-term, neighbourhood commercial and service needs of residents of the Lakes District;*

The OCP provides direction for the provision of commercial use within identified Neighbourhood Centres. Policies emphasize the neighbourhood orientation and scale of such services in support of a more pedestrian-friendly community.

C) **Neighbourhood Facilities** – *to provide recreational, educational, cultural and other community facilities for the neighbourhood and larger community;*

The OCP supports the provision of institutional, cultural, educational and community facilities for the use of neighbours and visitors to the Lakes District.

D) **Environmentally Sensitive Areas (ESAs) and Conservation** – *to avoid identified hazardous areas (e.g. geotechnical) and protect identified ESAs and other natural resources;*

The OCP supports the preservation of Environmentally Sensitive Areas (ESAs), acknowledging their role in structuring future development patterns; providing irreplaceable habitat for flora and fauna; and, where

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<sup>6</sup>Nanoose Bay Official Community Plan Bylaw No. 1400, 2005, Section 1.5.2, p.8

<sup>7</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of zoning and subdivision.

applicable, their inclusion within passive recreation areas. With respect to resource management, the OCP promotes the increased understanding and protection of Nanoose Bay's freshwater resources as it pertains to both urban growth management and conservation of habitat values.

- E) **Parks and Recreation** – *to establish parks, sidewalks, trails and open space based on existing and anticipated need;*

A major goal of the OCP is to establish in the long term a comprehensive trail system to preserve opportunities for recreation in the face of a growing population.

- F) **Development Phasing and Servicing** – *to establish a phasing strategy for development and servicing;*

The OCP provides several policy directives related to the provision of servicing for new development, particularly within identified urban growth areas.

- G) **Transportation** – *to provide for a variety of safe and efficient transportation modes that meet the needs of residents and visitors to the Lakes District, e.g. foot, bicycle, scooter, LSV, automobile, etc.*

Several areas within the OCP discuss objectives regarding the creation of safe and efficient transportation systems, in accordance with the Ministry of Transportation and Infrastructure's mandate. Additionally, alternative systems – including opportunities for “multi-modal” transportation corridors and trail systems – are also discussed.

OCP policy directives referenced above have directly informed the general intent and specific detail of the Lakes District Neighbourhood Plan. For the description of Neighbourhood Plan rationale and policies, refer to Section 2 - Neighbourhood Vision and Section 3 - Neighbourhood Land Uses.

#### 1.4.3 Existing Land Use & Zoning

##### *Official Community Plan*

The Lakes District Neighbourhood Plan area was designated as 'Fairwinds Land Use' at the time of Neighbourhood Plan preparation.

##### *Zoning Bylaw*

The entire Lakes District Neighbourhood Plan area is zoned Residential 1 (RS1 Subdivision District 'N'), which regulates the use and subdivision of land for single dwelling residential use.

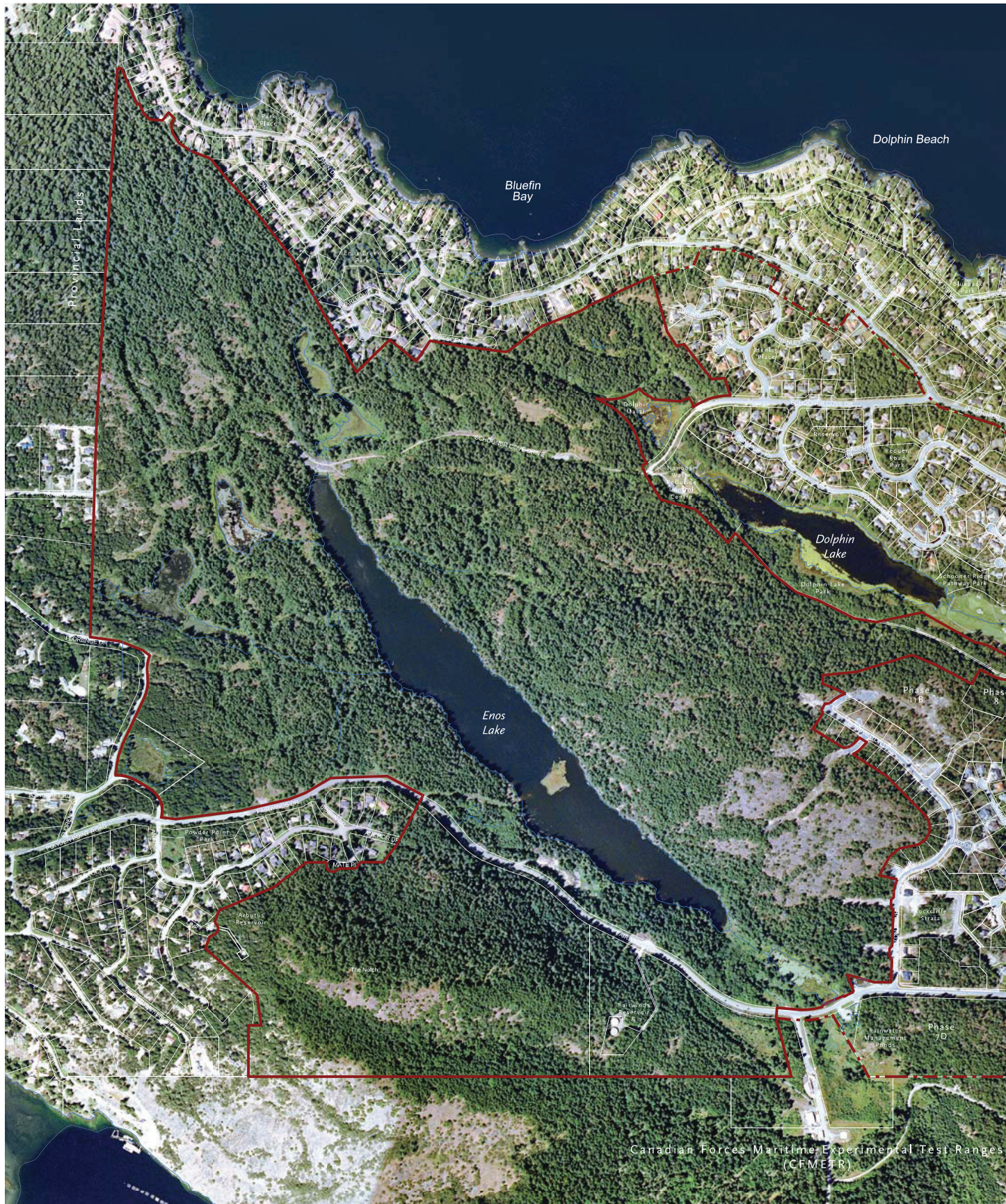


FIGURE 1 Nanoose Peninsula Context - for illustrative purposes only



LEGEND

- The Lakes District Neighbourhood Plan Area within OCP-designated Fairwinds Urban Containment Boundary
- - - Fairwinds Urban Containment Boundary



The Lakes District is bordered by Dolphin Lake and the existing Fairwinds neighbourhood to the east, the Canadian Forces Maritime Experimental Test Ranges to the south, the Dolphin Beach Neighbourhood to the north, and Florence Drive and Provincial lands to the west. This Plan provides a sustainable vision for The Lakes District.

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## 2 NEIGHBOURHOOD VISION

### 2.1 A VISION FOR THE LAKES DISTRICT

The vision for the Neighbourhood Plan is predicated on sensitively integrating growth through principles of sustainability and complete community design. The Lakes District Neighbourhood Plan provides for the phased development of a sustainable neighbourhood of diverse housing forms structured around a network of regionally significant parks. The Plan establishes the guide for growth of the Lakes District through the reconciliation of land use, environmental, servicing, transportation, and economic considerations and does so in a manner that respects and reflects local community values from regional policy directives to neighbourhood input.

### 2.2 PLANNING PRINCIPLES

The following principles have guided the Lakes District Neighbourhood Plan as a means of creating a complete community:

#### 1. Design compact, walkable neighbourhoods by:

- a) Creating a sense of place within each neighbourhood that is defined by the land;
- b) Providing a coherent neighbourhood pattern of streets and pathways with a variety of home and lot sizes;
- c) Designing people-friendly streets and fostering an enjoyable pedestrian experience;
- d) Encouraging walking by integrating parks and trails within easy walking distance (approximately 5-minutes) of each home; and
- e) Promoting neighbourhood safety through public realm design.

#### 2. Plan for alternative transportation by:

- a) Providing opportunities for multiple modes of transport, including walking, cycling, and public transit;
- b) Providing dedicated neighbourhood bicycle and pedestrian pathways to link community destinations;
- c) Accommodating alternatives, such as community cars and Low Speed Vehicles (LSVs), to reduce auto-dependence;
- d) Establishing a transit-friendly street network, with future opportunity for full service transit; and
- e) Reducing vehicle trips by locating basic neighbourhood services closer to home.

### **3. Employ green infrastructure by:**

- a) Supporting local food systems through community gardening, greenhouses and outdoor educational opportunities;
- b) Utilizing innovative best practices for rainwater and stormwater management, where applicable;
- c) Exploring alternative energy solutions, such as geo-exchange and passive solar design;
- d) Designing greener streets that minimize the visual, environmental, and physical impacts from conventional road building; and
- e) Promoting native plantings in landscape design, with special attention to xeriscaping and water conservation.

### **4. Conserve ecological integrity by:**

- a) Identifying and protecting both significant and sensitive terrestrial and aquatic habitats;
- b) Designing an interconnected network of wildlife corridors to secure habitat and ensure functional ecology at a landscape scale;
- c) Minimizing future disturbance of natural systems through comprehensive master-planning; and
- d) Promoting stewardship of natural systems through interpretive programs and outdoor educational opportunities in cooperation with local stakeholder groups.

### **5. Create integrated networks of parks and natural space by:**

- a) Providing public parks and natural spaces within easy walking distance (approximately 5-minutes) of all homes;
- b) Linking neighbourhoods and natural areas with a pedestrian trail network;
- c) Programming community parks for gatherings and recreation;
- d) Creating a variety of types and sizes of parks and natural areas to accommodate different activities and age groups; and
- e) Planning shared recreational facilities to ensure maximum community use and cost effectiveness.

### **6. Celebrate our natural heritage by:**

- a) Promoting active education and appreciation of our west coast natural history;
- b) Integrating community uses into the landscape, celebrating the unique views and vistas, landforms and natural character;
- c) Retaining the natural qualities and character of the landscape in the public realm;
- d) Nurturing community history and memorialize local people, places, and events; and
- e) Designing public spaces that reflect the sense of place through regional design and the use of local materials.

**7. Foster a vibrant and diverse age-mixed neighbourhood by:**

- a) Providing a variety of housing choices, from compact homes to ridge-top estates;
- b) Accommodating a range of lifestyles and life-stages through the development of more compact, more affordable housing forms;
- c) Planning for “aging in place” through encouraging the “SAFERhome” standards in response to a maturing population;
- d) Promoting a variety of housing tenures (i.e. fee simple and strata ownership); and
- e) Providing a range of amenities for all age groups throughout the neighbourhood.

**8. Support an economically sound neighbourhood, by:**

- a) Supporting the creation of a walkable community with a neighbourhood centre serving as a focal point for employment, shopping, education, recreation and social gathering;
- b) Incorporating residential density to support local businesses and community facilities;
- c) Planning compact communities to reduce infrastructure networks and maintenance costs;
- d) Developing a mix of uses within the community to foster local business, provide employment and increase the local tax base; and
- e) Establishing a varied mixture of land uses, household types, and building forms for a variety of residents.

**9. Celebrate local art and culture by:**

- a) Designing opportunities to live, work and sell art in the community;
- b) Educating residents and visitors about local cultural history;
- c) Incorporating local culture and sense of place in the design of new developments;
- d) Planning for the integration of art, theatre, and other local cultural activities into the programming of community gathering spaces; and
- e) Rekindling the spirit of the public realm, especially local streets, parks and plazas for the celebration of local art and culture.

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## 2.3 ESTABLISHING THE NEIGHBOURHOOD CHARACTER

While the structure of the Lakes District neighbourhood is established by the complimentary network of parks, trails and streets and sidewalks, its character is defined by the relationship between the built form and the surrounding landscape. In an effort to strengthen those relationships, the Neighbourhood Plan identifies the following elements which define and preserve the unique character of the Lakes District:

An extensive public park system identifies a significant portion of the Lakes District Neighbourhood Plan area to be maintained in its existing natural state. The network of parks preserves character through the protection of defining landscapes, provision of passive recreation opportunities and conservation of functional ecosystem habitat. The landscape character of the Lakes District park system is illustrated in **Figure 3 - Neighbourhood Character – Parks**.

Neighbourhood streets designed with pedestrian and cycle pathways that fit the land will complement the system of parks and trails providing alternative pedestrian-oriented connections, while minimizing the visual, physical and environmental impacts of development. For a more detailed discussion, refer to Appendix I: Technical Reports - Project Specific Street Standards.

The **clustering of homes** within the neighbourhood serves to further preserve natural landscape features and maintain the land's sense of place. In contrast to the uniform housing choice today within the Fairwinds UCB, a more diverse mix of home types and sizes for the Lakes District focuses on expanding the range of affordability and choice, while respecting the character of adjacent existing neighbourhoods. More compact housing forms better support the overall design intent for the Lakes District as a more walkable and complete community that protects a greater proportion of the natural landscape.

The Lakes District DPA Guidelines will help to articulate the desired neighbourhood character and provide an additional level of assurance in implementing the vision for the Neighbourhood. **Figure 4 - Neighbourhood Character – Public Realm** illustrates the general form and character of the public realm for the Lakes District to create a unique sense of place. Similarly, **Figure 5 - Neighbourhood Character – Residential** provides a general sense of the character and scale for the residential neighbourhoods. Refer to Section 5: Development Permit Areas.



FIGURE 2 Neighbourhood Illustrative Concept - *for illustrative purposes only*





The Lakes District Neighbourhood Plan establishes a sustainable neighbourhood of diverse housing forms structured around a network of ecologically significant parks. The Plan provides a Lakehouse as the community focal point on Enos Lake, with parks within a 5-minute walk of each home accessed by a multi-modal, pedestrian-friendly transportation network of traffic-calmed streets, tree-lined pathways, and forest trails.



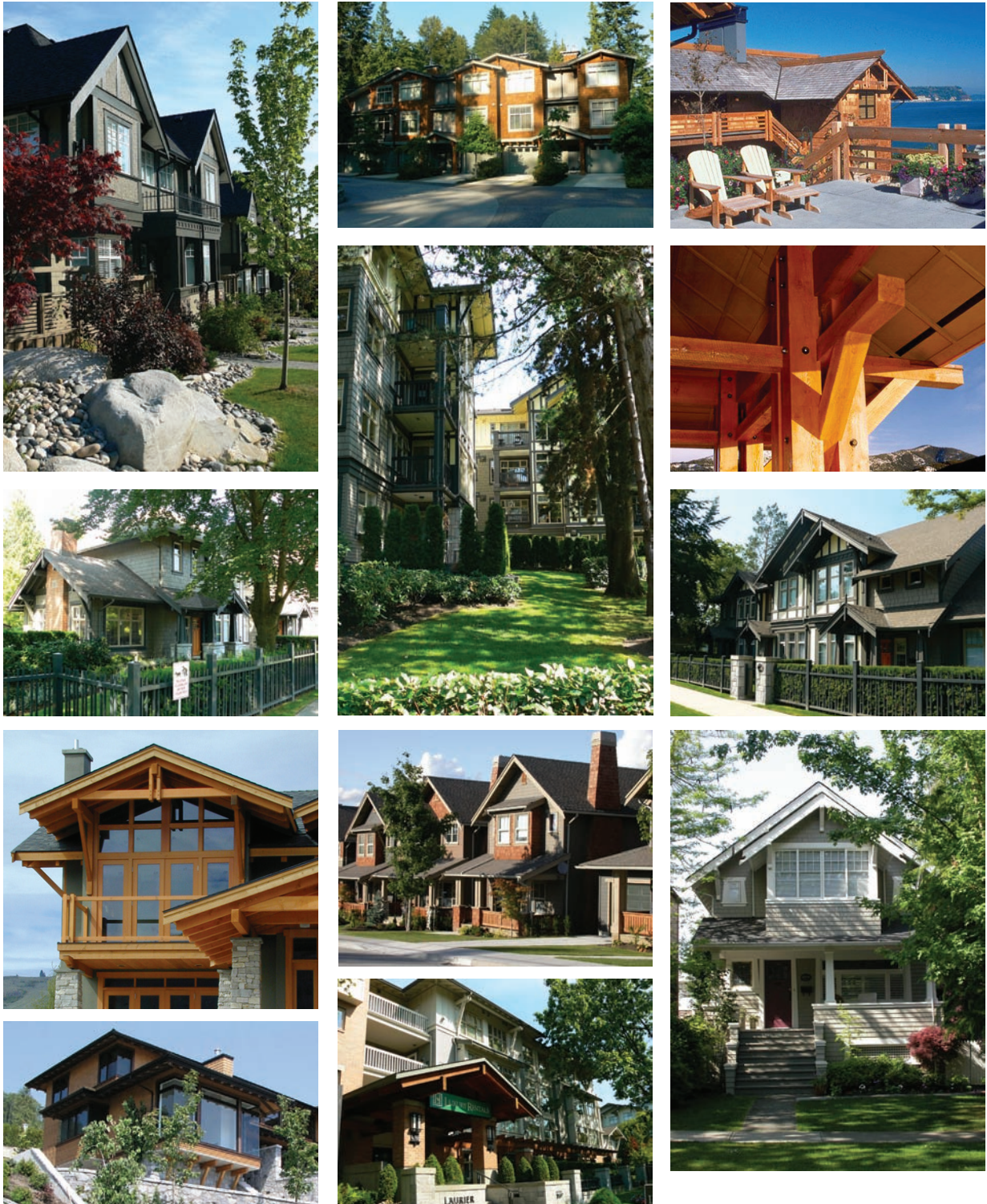
Public Parks ensure the protection of the functional integrity of natural systems, its landscape character and recreational opportunities. Actively-programmed Community Parks establish formal gathering areas and serve as neighbourhood focal points, whereas passive Community Parks preserve identified conservation values, and landscape character. The Regional Park provides public access to recreational opportunities - from destination lookouts atop The Notch and Lookout Hill, to the Enos and Dolphin Lakes loop trails - while protecting ecological values, including Garry oak meadows, identified ESA's, raptor nesting areas, and habitat for amphibians.

**FIGURE 3** Neighbourhood Character - Parks - *for illustrative purposes only*



The public realm of the Lakes District will be comprised of design elements that together establish an attractive and coherent visual identity predicated on the concept of living with the land, sensitively integrating built form in a way that protects the integrity of the landscape. Elements such as the street design, lighting, wayfinding signage, street furniture, and landscaping will play an important role in the function and experience of the neighbourhood.

**FIGURE 4** Neighbourhood Character - Public Realm - *for illustrative purposes only*



The clustered neighbourhood design of the Lakes District employs ‘green fingers’ of natural landscape to achieve a healthy balance of residential form within a network of parks and open space. Generally oriented towards the street and sited to minimize disturbance, homes are well connected by walking and cycling paths to permit easy access to civic amenities. Inspired by the use of west coast materials of timber and stone, the Neighbourhood’s form and character will reflect the natural landscape of Nanoose Bay.

**FIGURE 5** Neighbourhood Character - Residential - *for illustrative purposes only*

### 3 NEIGHBOURHOOD LAND USES

The Lakes District Neighbourhood Plan consists of land use designations which provide “form and function” to the vision for the community. It translates the design concept and character into a specific plan that articulates the program of uses.

#### 3.1 LAND USE PLAN

The Lakes District Neighbourhood Plan, as illustrated in **Schedule A.1 - Land Use Plan** consists of nine land use designations, as listed below.

The land use designations are described in this section which, together with their planning rationale and associated policies, are intended to guide the future development of the Lakes District Neighbourhood Plan area.

A synopsis of the land use designations is presented in **Table 1 – Neighbourhood Plan Land Use Summary**.

Table 1 – Neighbourhood Plan Land Use Summary

	Land Use	Area hectares <sup>7</sup>	Density Range Uph (net)	
41.5%	Regional Park	118.55	-	
0.6%	Community Park	2.74	-	
3.1%	Future Development Reserve	11.04	-	
23.9%	Single Dwelling	68.20	7 - 12	} Max yield: 1675 units
16.2%	Single Dwelling & Duplex	46.36	12 - 25	
2.7%	Multiple Dwelling	7.72	35 - 75	
0.6%	Community Mixed Use	1.92	35 - 75	
0.3%	Lakehouse Community Centre	0.92	-	
0.3%	Civic Infrastructure	1.37	-	
9.4%	Road Right-of-Way	26.99	-	
100%		285.81		

#### Policies

- a. A maximum of 1675 dwelling units shall be permitted in The Lakes District Neighbourhood Plan area, which is part of the total 2500 dwelling units as recognized in the Fairwinds Urban Containment Boundary.

<sup>7</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of zoning and subdivision.

## 3.2 LAND USE DESIGNATIONS

### 3.2.1 Public Park Network: A Framework for Future Land Use

The public park network for the Lakes District was established through the creation of a Conservation Plan. More specifically, the design of the public park network is based on the technical investigation of conservation and recreation values within the Lakes District and serves to preserve extensive habitat for wildlife while accommodating recreational needs of the community.

The “green heart” of conservation in the Lakes District consists of Enos Lake, the Terrace Wetlands, the Garry oak Meadows, the Ridge Lookout, and Notch Hill, all of which have been identified in the terrestrial biophysical assessment as significant areas for conservation (see **Appendix I: Technical Reports – Environmental Review**). Component parts of conservation planning included steep slopes and rocky outcrops, lakes, streams and wetlands, Garry oak and Douglas fir ecosystems, wildlife Corridors and Environmentally Sensitive Areas.

The intent of the public park network is to ensure the protection, in perpetuity, of the functional integrity of natural systems, the recreational opportunities associated with passive and active outdoor activities, and the natural features that define the landscape character of the Lakes District. The Lakes District conservation plan including the public network of parks and trails, are illustrated on **Schedule A2 – Park and Environmental Network Plan** (refer to **Appendix I: Technical Reports - Environmental Review** for complete analysis of the area’s significant environmental features and habitat zones).

Finally, the parks network proposes an extensive and interconnected system of public parks and pathways generally within a 5-minute (400m) walk from each home within the Lakes District. The Regional Community Parks, provide an invaluable community amenity, linking homes, natural areas, civic and recreation destinations; thereby establishing a high level of neighbourhood walkability. Three general trail categories, in combination with required pedestrian bridges and boardwalks, are envisioned to respond to the opportunities, constraints and character of the neighbourhood. The highest order multi-use trail will be the most accessible for a diversity of modes and users with 1.5 m – 2.5 m widths. Walking trails will provide for the mid range of pedestrian activity and ability with mild slopes and 1.0 m – 1.8 m widths. Where terrain is more challenging and/or environmental conservation is the priority, hiking trails 0.75 m – 1.0 m wide will provide for recreational pursuits with more challenging segments.

Detailed on Schedule A2 in concept, all trail alignments shall be determined by the development of a RDN Parks Management Plan. In addition, exact locations and trail/boardwalk types will be determined at the time of construction when geotechnical feasibility is assessed, pertaining to the trails around the south end of Enos Lake in particular.

### 3.2.2 Regional Park

#### Description

The primary focus is on protection of the identified, Regionally-significant natural environment, with limited access and low impact activities such as trails and environmental interpretive facilities.

The Regional Park designation, as shown on **Schedule A.1 – Land Use Plan** and on **Schedule A2 – Park and Environmental Network Plan**, contains approximately 41.5% or 118.5 hectares of the Neighbourhood Plan area.<sup>8</sup>

#### Rationale

Several elements of the designated Regional Park area are identified within the RDN Regional Parks and Trails Plan 2005-2015, and the Nanoose Bay Parks and Open Space Plan, including community trail corridors, priority park acquisition areas (The Notch and The Lookout), and identified conservation values, including Garry oak ecosystems and eagle nest sites. The Lakes District Neighbourhood Plan protects these and other identified park features mainly through public dedication of the areas identified with Regional Park designation. The development of a Park Management Plan for the Lakes District Regional Park will provide more detailed management objectives and policies with respect to overall conservation and recreational goals within the dedicated Regional Park.

#### Policies

- a. The Regional Park lands – as shown in Schedules A1 and A2 – shall be dedicated to the RDN according to a schedule outlined with a Phased Development Agreement (PDA). The PDA will be required as a condition of zoning to identify future implementation obligations, including phasing of park land dedication, phasing and financing of community amenities, and the provision of infrastructure and/or any other capital improvements, including but not limited to trail planning, design and construction.
- b. In conjunction with the landowner and according to a schedule outlined within the PDA, develop a Park Management Plan to identify:
  - i. conservation, restoration, and recreation priorities within the Regional Park;
  - ii. the location of park facilities, including but not limited to trails, trailheads, parking areas (autos and bicycles), shelters, and/or signage; and,
  - iii. additional/specific management plans for identified priorities, including but not limited to Garry oak meadows and Enos Lake.
- c. In conjunction with the landowner and according to a schedule outlined within the PDA, determine a detailed layout of the trail system design to be constructed to a Trail Standard in consultation with a professional biologist to limit impact on sensitive areas (i.e. SPEAs, Garry Oak meadows).

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<sup>8</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of zoning and subdivision.

- d. Where identified within a Parks Management Plan, decommission existing trails (not required for recreational purposes) in order to restore damaged habitat.
- e. In conjunction with the landowner and according to a schedule outlined within the PDA, prepare a Garry Oak Meadows Management Plan including invasive species management practices and monitoring program that are linked to an adaptive management decision framework.
- f. In conjunction with the landowner and the appropriate federal and provincial agencies and according to a schedule outlined within the PDA, develop an Enos Lake Protection and Monitoring Program which includes, but is not limited to: base line water quality monitoring and assessment acceptable to the provincial Ministry of Environment (MoE); support in the development of site specific Water Quality Objectives for Enos Lake based on MoE protocols; and guidelines for invasive species management practices.
- g. Provide wildlife corridors and crossings linking protected natural areas with each other and with adjacent lands. Wildlife corridors should allow for both north-south and east-west movements.
- h. The landowner shall, at the time of development, design and construct wildlife road underpasses at appropriate locations (as noted in Appendix 6 of the Environmental Impact Assessment) for the passage of small wildlife, following the advice of a biologist's survey to identify the most suitable locations, subject to approval of relevant federal and provincial agencies.
- i. Preserve movement of wildlife by providing public trails along edges of Wildlife Corridors, where feasible/required.
- j. Non-motorized pathway linkages that connect to Regional Parks and Community Parks, as well as adjacent residential areas, the adjacent Fairwinds, and Schooner Cove neighbourhoods shall be provided.
- k. Ensure that the alignment of trails considers ecological integrity, wildlife, surrounding residential uses, and where feasible, the existing trail network. New trail alignments shall be located outside identified Streamside Protection and Enhancement Areas (SPEAs).
- l. Support the construction of clear span bridges in place of open-bottomed culverts for watercourse crossings, subject to approval of relevant federal and provincial agencies.
- m. Establish destination points such as areas for passive recreation and informal viewpoints.
- n. Jointly, with the landowner, incorporate interpretive signs that celebrate the natural and cultural heritage of the Lakes District.

### 3.2.3 Community Park

#### Description

The focus of the Community Park dedication is the provision of smaller, more intensely programmed park spaces associated within convenient distance of neighbourhood residences. The Community Park designation also accommodates a number of public pathways linking to the Regional Park & trails system.



The Community Park designation, represented on **Schedule A.1 – Land Use Plan** and on **Schedule A2 – Park and Environmental Network Plan**, contains approximately 1% of the Neighbourhood Plan area, representing approximately 2.74 hectares.<sup>9</sup>

### Rationale

Within the context of the Lakes District Neighbourhood Plan, where overall park dedication includes approximately half of the Plan area for conservation and passive recreation purposes, Community Park areas are limited to a minimum number of smaller neighbourhood gathering.

Community Parks are strategically located within residential areas to serve as a neighbourhood amenity and social gathering area. Community Parks will create a focal point for each residential area and serve as more intensively programmed recreational areas for residents and visitors. While Community Parks are designated to provide more active recreational programs, the presence of sensitive environmental features may require additional management strategies in accordance with a Park Management Plan.

### Policies

- a. The Community Park lands – as shown in Schedules A1 and A2 – shall be dedicated to the RDN according to a schedule outlined with a Phased Development Agreement (PDA). The PDA will be required as a condition of zoning to identify future implementation obligations, including phasing of park land dedication, phasing and financing of community amenities, and the provision of infrastructure and/or any other capital improvements, including but not limited to trail planning, design and construction.
- b. In conjunction with the Landowner and according to a schedule outlined within the PDA, develop a Park Management Plan to identify conservation, restoration, and recreation priorities within Community Parks, as well as the location of park facilities, including but not limited to trails, trailheads, parking areas (autos and bicycles), shelters and/or signage;
- c. The design and programming of Community Parks shall address the needs of all neighbourhood residents and visitors, including design for universal accessibility.
- d. Provide for rainwater (stormwater) management on site, where feasible and ecologically appropriate.
- e. Where identified within a parks management plan, decommission existing trails (not required for recreational purposes) in order to restore damaged habitat.
- f. Provide non-motorized pathway linkages that connect Community Parks to residential areas and, to the extent feasible, the adjacent Fairwinds and existing neighbourhoods.

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<sup>9</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of rezoning and subdivision.

- g. Ensure that the alignment of trails is sensitive to the environment, wildlife, surrounding residential uses, and where feasible the existing trail network.
- h. Incorporate a hierarchy of trail classes to provide for a range of skill levels and uses, including transportation, recreation, education and interpretation.
- i. Establish destination points such as areas for passive recreation and informal viewpoints.
- j. Consider community amenities such as small playgrounds, community gardens/greenhouses, reflecting ponds, rain gardens and/or an outdoor amphitheatre.
- k. Where appropriate, jointly with the landowner provide interpretive signs that celebrate the natural and cultural heritage of the Lakes District.
- l. Where applicable, accommodate additional program elements for community gathering areas, including bicycle racks, transit stops/shelters, community mailboxes, bulletin boards, civic art and/or covered pavilions.

### 3.2.4 Future Development Reserve

#### Description

The Future Development Reserve designation identifies lands which the RDN has a specified period of time to acquire for additional Regional Park.

The Future Development Reserve designation, as shown on **Schedule A.1 – Land Use Plan** and on **Schedule A2 – Park and Environmental Network Plan**, includes approximately 3.8% or 11.04 hectares of the Neighbourhood Plan area.<sup>10</sup>

#### Rationale

Notwithstanding that these areas have been identified as suitable land for development through biological and other technical investigations, it is recognized that the community’s preference for this land is as park.

#### Policies

- a. The Future Development Reserve lands shall be identified within a Phased Development Agreement (PDA) and secured through an option to purchase agreement. The PDA will be required as a condition of zoning to identify future implementation obligations, including specific timing of the agreement, according to overall Neighbourhood Plan development phasing.
- b. Establish an “option to purchase” and “no build” covenant agreement between the landowner and the RDN with a no-build covenant registered on title at the time of subdivision, according to the terms specified within a Phased Development Agreement and including:

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<sup>10</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of rezoning and subdivision applications.

- i. The term for the agreements shall be not more than two years; and,
- ii. Land value shall reflect Fair Market Value assuming current entitlements (RS1 Zoning) as determined by a third-party appraisal.
- c. RDN to pursue park acquisition options for the identified Future Development Reserve areas.
- d. Lands acquired will be used as park land and are subject to the Park policies of this Plan.

### 3.2.5 Residential – Single Dwelling & Single Dwelling/Duplex

#### Description

The Lakes District Neighbourhood Plan supports single dwelling units in a range of densities with the Residential – Single Dwelling & Single Dwelling/Duplex land use designation. Duplex use is supported specifically in the single Dwelling/Duplex land use.

#### *Single Dwelling*

Single Dwelling lands allow residential development on larger lots, where retention of natural site features is desirable. The Single Dwelling designation allows for the development of a wide range of architectural forms and provides for greater flexibility in building siting.

The Single Dwelling designation accounts for approximately 68.2 hectares or 23.9% of the Neighbourhood Plan area, and accommodates net densities (exclusive of roads and open space areas) in the range of 7-12 uph.<sup>11</sup>

#### *Single Dwelling/Duplex*

Lakes Single Dwelling/Duplex lands are designated to increase the range of housing types offered and provide transition between larger lot single dwelling residential land uses and low to medium density housing. The provision of smaller, single dwelling units and duplex homes also serves to better facilitate cluster development to maintain of high conservation and recreation value.

The Lakes Single Dwelling and Duplex designation accounts for approximately 46.36 hectares or 16.2% of the Neighbourhood Plan area and accommodates net densities (exclusive of roads and open space areas) in the range of 12-25 uph.<sup>19</sup>

#### Rationale

The Residential Single Dwelling designation clusters single dwelling neighbourhoods separated by “green fingers” of natural open space and park. This provides for reducing the impact of development adjacent to areas with identified high conservation values. These designated lands are carefully

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<sup>11</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of rezoning and subdivision.

integrated within the existing hillside terrain to respect existing natural features and achieve a healthy balance of diverse residential land use and natural areas.

Dwelling units within the Residential Single Dwelling/Duplex homes land use designation will be oriented towards the street and are sited so as to minimize disturbance to hillsides and to take advantage of associated vistas. The residential areas will be well connected by walking and cycling paths to permit easy access to nearby parks and other civic amenities. The designation attempts to establish a high level of visual connectivity between residential areas and park areas, fostering a liveable, pedestrian-oriented environment.

The variety of housing forms and lot sizes – from large lot single family homes to more compact single dwelling homes and semi-detached duplexes – provides for a greater diversity of housing types and price ranges, while allowing for clustering and a more gradual transition between low density large lots and higher density attached housing within a more urban pattern.

### **Policies**

- a. Where appropriate, secure public (pedestrian) access through strata developments in order to ensure connectivity within the community.
- b. Ensure that Residential – Single Dwelling development addresses the vision outlined in the Lakes District Neighbourhood Plan as outlined in Section 2 – Neighbourhood Vision, respects and is compatible with the Lakes District Neighbourhood Plan policies. Maximum net residential densities (exclusive of roads and open space areas) shall not exceed 12 units per hectare.
- c. The provision of a variety of housing forms and lot sizes to provide more affordable housing choices in support of a range of income levels and age groups shall be encouraged.
- d. Work with MoTI to ensure the provision of universally accessible pathways along major streets.
- e. Work with the appropriate government agencies to encourage sidewalks and public parking areas to be designed according to barrier free access standards.
- f. The retention of natural vegetation where feasible as well as the use of native and drought resistant vegetation for new development shall be encouraged.
- g. The use of best practices in green building for all new construction shall be encouraged.
- h. Gated communities shall not be permitted.

### 3.2.6 Residential – Multiple-Dwelling

#### Description

The Lakes District Neighbourhood Plan supports multiple-dwelling units in a range of densities with the Residential – Multiple-Dwelling land use designation.

#### *Multiple-Dwelling*

The Residential Multiple-Dwelling designation allows for the development of a range of multiple housing types from duplex homes (also permitted in the Lakes Single Dwelling & Duplex designation), to ground-oriented rowhomes and townhomes, to low-rise condominiums up to 5 storeys.

The Multiple Dwelling residential designation accounts for approximately 7.72 hectares or 2.7% of the Neighbourhood Plan area and accommodates net densities (exclusive of roads and open space areas) in the range of 35-75 uph.<sup>12</sup>

#### Rationale

The Multiple Dwelling residential designation further supports a high-level of connectivity between residential land uses and parks and trails, located adjacent to Neighbourhood Commons and areas of highest recreational access. The Multiple-Dwelling residential precincts are well connected by walking and cycling paths to permit easy access to neighbourhood amenities and services, and foster a more liveable, pedestrian-scale neighbourhood.

Smaller unit types respond to community needs to accommodate greater affordability and opportunities for ageing-in-place. While this land use designation provides for a range of multi-dwelling forms, it is anticipated that the Multiple-Dwelling designation would favour condominium units within low-rise apartment buildings. In addition, Multiple-Dwelling residential areas accommodates a significant population while minimizing the overall footprint of residential development in locations adjacent to community parks, major crossroads, vistas, amenities and/or gathering areas.

#### Policies

- a. Ensure that Multiple-Dwelling residential development addresses the vision outlined in Section 2 - Neighbourhood Vision of the Lakes District Neighbourhood Plan, and is compatible with the Neighbourhood Plan policies and DPA guidelines. Maximum net residential densities shall not exceed 75 units per hectare.
- b. The provision of a variety of more affordable housing choices in support of a range of income levels and age groups shall be encouraged.
- c. Require all multiple-dwelling development to obtain a Development Permit to address the form and character of development.

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<sup>12</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of rezoning and subdivision.

- d. Secure the provision of additional community amenities – such as pedestrian trails between buildings – as part of new development for public and semi-private open space and facilities at the time of zoning amendment.
- e. Work with MoTI to ensure the provision of universally accessible pathways along major streets.
- f. A maximum of five storey total building height may be permitted, in accordance with DPA guidelines. On sloping lots, and where underground parking is incorporated, a maximum of two additional storeys may be considered for partially exposed parkades.
- g. The use of best practices in green building for all new home construction shall be encouraged.
- h. Gated communities shall not be permitted.

### 3.2.7 Community Mixed Use

#### Description

In keeping with the Official Community Plan's approximate location of a Neighbourhood Centre at the western extent of Fairwinds Drive in the Lakes District, the Community Mixed Use designation will accommodate a mix of neighbourhood-scale civic, commercial and residential land uses.

The Community Mixed Use designation accounts for a gross area of approximately 1.92 hectares (0.7%)<sup>13</sup> of the Lakes District Neighbourhood Plan area. The Community Mixed Use designation permits Lakes Multi-Dwelling residential uses (accommodating net densities—exclusive of roads and open space areas—in the range of 35-75 uph) in combination with neighbourhood-scale commercial services and/or civic uses.

#### Rationale

Due to its terraced position – providing distant water views – and its location at the entrance to the Lakes District – providing convenient access – the Community Mixed Use area is recognized for its flexibility to serve future needs of the neighbourhood.

Owing to site topography, the Community Mixed Use area will not front uses along the entry intersection with Schooner Cove Drive but will share access with Powder Point Park via the Bosun Drive intersection.

Mixing residential, neighbourhood-serving commercial and public amenities provides further compact housing options, small scale retail and community gathering spaces. In addition to the existing, more regional commercial centre at Red Gap, and notwithstanding the commercial program at Schooner Cove, the Community Mixed Use area provides serviced land to accommodate future need for additional services and/or other neighbourhood-oriented land uses.

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<sup>13</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of rezoning and subdivision.

## Policies

- a. Uses may include residential, live/work and/or professional office, neighbourhood commercial, storage and/or neighbourhood recycling centre.
- b. Ensure that Community Mixed Use development addresses the vision outlined in Section 2 - Neighbourhood Vision. Maximum net residential densities shall not exceed 75 units per hectare.
- c. Generally locate commercial uses at grade, allowing no more than two storeys (8 metres) of commercial space, with residential on upper storeys.
- d. A maximum of five storey total building height may be permitted, in accordance with DPA guidelines. On sloping lots, and where underground parking is incorporated, a maximum of two additional storeys may be considered for partially exposed parkades.
- e. At the time of development permit a shared-use parking study to determine Community Mixed Use parking requirements will be required.
- f. Shade and protection from the elements for pedestrians shall be provided through the provision of building awnings, overhangs, canopies, and/or arcades.
- g. Sidewalks and parking areas shall be designed according to barrier-free access standards.
- h. Work with appropriate government agencies to encourage the provision of pathways along major streets.
- i. The use of best practices in green building for all new building construction shall be encouraged.
- j. Single storey (strip) commercial uses shall not be permitted.
- k. The provision of parking spaces in the Community Mixed Use area shall be determined according to the findings of a shared-use parking study. Shared parking prevents the construction of large parking areas that are vacant for parts of the day or in the evening that might visually detract from the community experience. A shared use parking agreement should be prepared to facilitate parking in the Community Mixed Use area.

### 3.2.8 Lakehouse Centre

#### Description

The Lakehouse Centre designation is intended to create an attractive, vibrant, pedestrian-oriented recreational heart for the Lakes District community. Located adjacent to the public park and trail network on Enos Lake, the Lakehouse Centre provides lake edge location, south-western light and views of the water for community gatherings.

The Lakehouse Centre accounts for a gross area of approximately 0.92 hectares or 0.3% of the Lakes District Neighbourhood Plan area.<sup>14</sup>

A privately operated facility, the primary function of the Lakehouse Centre will serve as an amenity centre for the community and as a secondary use, the Lakehouse centre may offer support program/services for Regional Park staging.

### Rationale

While the Lakes District Neighbourhood Plan area is organized around a robust public recreational system of parks and trails, the Lakehouse Centre designation provides for a more formal amenity centre for the neighbourhood.

Amenities/services provided here will be complimentary to the existing Fairwinds Centre and is intended to further support residents' recreational and cultural opportunities. The Lakehouse Centre will accommodate passive access to and use of Enos Lake in combination with fitness facilities and more flexible amenity space for the use of local residents. As a secondary use, the Lakehouse Centre may also include small program space for Regional Park administration and may offer staging facilities for use of the Regional Park and trail system

### Policies

- a. Amenities/services provided will be complimentary to the existing Fairwinds Centre and are intended to support residents' recreational and cultural opportunities.
- b. One caretaker's suite and a maximum density of 12 uph for temporary guest accommodation and/or permanent residential use may be allowed.
- c. A small space for Regional Park administration and staging facilities for the Regional Parkland trail system may be allowed as a secondary use.
- d. Ensure that Lakehouse Centre development addresses the vision outlined in Section 2 - Neighbourhood Vision of the Lakes District Neighbourhood Plan and is compatible with the Neighbourhood Plan policies.
- e. The height of Lakehouse Centre buildings shall be up to four storeys total building height, including roof peaks and exposed basements.
- f. Neighbourhood amenities (including public access over Lakehouse Centre grounds) as part of new development for public and semi-private open space and facilities such as pedestrian trails between buildings shall be secured as a condition of rezoning according to a Phased Development Agreement (PDA).
- g. Work with MoTI to encourage the provision of universally accessible pathways along major streets.
- h. The use of best practices in green building shall be encouraged.
- i. The provision of a safe pedestrian access and staging platform to the water for passive, non-motorized enjoyment of the lake shall be encouraged.

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<sup>14</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of rezoning and subdivision.



### 3.2.9 Civic Infrastructure

#### Description

The Civic Infrastructure designation, illustrated on **Schedule A.1 – Land Use Plan**, contains approximately 0.5% of the Neighbourhood Plan area or 1.37 hectares of the total Lakes District area. The Civic Infrastructure designation is applied to land which is used for public utilities in the Neighbourhood Plan area, specifically related to the provision of potable water, sanitary sewer servicing and management of rainwater.

#### Rationale

The Lakes District Neighbourhood Plan requires land uses which accommodate the current and future public servicing/utility requirements of residential, commercial and other associated uses. The Plan distinguishes between Civic Infrastructure designations and public road right-of-ways (which account separately for 9.4% or 26.99 hectares.<sup>15</sup>

#### Policies

- a. Ensure that Civic Infrastructure development addresses the vision outlined in the Lakes District Neighbourhood Plan as outlined in Section 2 – Neighbourhood Vision, respects and is compatible with the Lakes District Neighbourhood Plan policies.
- b. The Landowner shall provide a centralized rainwater (stormwater) management pond complex at the head and foot of Enos Lake subject to the schedule defined within a Phased Development Agreement to be determined at the time of rezoning.
- c. At the time of rezoning, the Landowner shall provide parcels of land suitably sized and located for the provision, expansion and/or relocation of potable water systems (reservoirs, etc.) and other civic infrastructure, as appropriate.
- d. Lands in this designation shall only be used for civic infrastructure.

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<sup>15</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of rezoning and subdivision.

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## 4 NEIGHBOURHOOD INFRASTRUCTURE

The provision of all requisite infrastructure to service the Lakes District Neighbourhood Plan area is critical to its success from economic, social, and environmental perspectives. While the functional demand created by the neighbourhood's ultimate population (at build-out) must be accommodated, the planning of new infrastructure will also take into account pedestrian-friendly solutions, water and energy conservation, and any associated environmental impacts. It is acknowledged that a Local Service Area may need to be established to support these functions.

### 4.1 TRANSPORTATION

#### *Road Network*

A Traffic Impact Study (TIS) was undertaken, in consultation with the BC Ministry of Transportation and Infrastructure (MoTI), to evaluate the long term order of magnitude impacts of the development of the Lakes District and Schooner Cove as per their respective Neighbourhood Plans (Refer to *Appendix I: Technical Reports – Transportation Review* for the complete Traffic Impact Study).

The TIS concluded that the existing road network will require the following improvements as determined solely by increases in traffic volumes from implementation of the Lakes District Neighbourhood Plan:

- Extension of Schooner Cove Drive to Fairwinds Drive to a construction road standard upon the commencement of development within the Lakes District with completion to occur coincidentally with development at this location;
- Extension of Bonnington Drive to Schooner Cove Drive coincidentally with development at this location;
- Completion of the new Terrace Drive Collector (linking the northwestern-most residential areas and Community Park with Schooner Cove Drive) coincidentally with development at this location;
- A northbound right turn lane on Schooner Cove Drive at Fairwinds Drive, or a Gateway Roundabout in conjunction with completion of the Schooner Cove Drive extension; and,
- A roundabout or three-way stop at Northwest Bay Road and Powder Point Road with a northbound channelized right turn when site traffic increases demand for the movement by approximately 250 vehicles at peak times (see Schedule A3 - Street Hierarchy Plan).

These upgrades address all identified potential capacity constraints. A potential discretionary improvement to be reviewed at the detailed design stage includes left turn lanes on Dolphin Drive at points of access to Schooner Cove Village. Separate improvements by MoTI, triggered by future background traffic projections regardless of actual site traffic from the Neighbourhood Plans, include potential dual southbound left turn lanes at the intersection of Highway 19 and Northwest Bay Road.

The recommended improvements for Highway 19 and Northwest Bay Road, Powder Point Road and Northwest Bay Road, and the extension of Schooner Cove Drive to Fairwinds Drive are currently identified in the future Road Network Plan in the RDN Nanoose Bay OCP, and the MoTI Road Network Plan.

The ultimate timing and responsibility for implementation of all aforementioned infrastructure upgrades will be determined with the MoTI, in accordance with a schedule outlined within a Phased Development Agreement, required at the time of zoning amendment.

### ***Alternative Transportation***

The *Local Government (Green Communities) Statutes Amendment Act (2008)* requires local governments to set greenhouse gas (GHG) reduction targets. The RGS's designation of UCBs in Nanoose Bay is an example of a key strategy to change land use patterns in support of transportation alternatives.

The Lakes District Neighbourhood Plan will establish a nodal pattern of development which supports transit viability and provision of infrastructure for non-vehicular modes. Street design is a significant contributor to travel behaviour, and as such, Project Specific Street Standards with lower design speeds suited to hillside terrain and with inclusion for separate multi-modal travel lanes on the Community Parkway alignment have been prepared in consultation with MoTI for their approval (see *Appendix I: Technical Reports - Project Specific Street Standards*).

### ***Transit***

Within the Nanoose Peninsula, the Plan area is not currently served by transit owing to the lack of required population density to provide for a financially viable level of ridership. Prior to completion of the Village area of the adjacent Schooner Cove, the RDN shall undertake a Transit Feasibility Study to assess the potential for service for the Lakes District and Schooner Cove neighbourhoods. Upon completion of the commercial Village, associated multi-dwelling residential units and marina enhancements, ridership demand from people living within the Fairwinds and Schooner Cove UCBs as well as rural Nanoose Bay residents may support expanded public transit service. Transit demand will continue to increase as the Lakes District Neighbourhood Plan area and adjacent Schooner Cove Neighbourhood are built out.

#### **4.1.1 Street Hierarchy**

Streets are central civic elements in the comprehensive design of a neighbourhood plan. Streets provide for circulation and their design should serve to unify the private and public realms and enhance neighbourhood safety. Taking the topography and landform of the Lakes District into consideration, the street network with its hierarchy of street types further structures the pattern of land uses in the neighbourhood.

Streets serve a number of vital engineering functions. Above ground, streets and sidewalks provide for safe, uninterrupted movement through the neighbourhood. Below the surface, streets house the neighbourhood's utilities, including water, storm and sanitary services, as well as electrical, gas and telecommunication links.

The Lakes District Neighbourhood Plan provides a hierarchy of streets, as shown on Schedule A3 – Street Hierarchy Plan.

Furthermore, the Lakes District Neighbourhood Plan proposes the use of Project Specific Street Standards (subject to approval by the MoTI) appropriate for a more urban setting, as illustrated in *Appendix I: Technical Reports - Project Specific Street Standards*.

The street hierarchy plan contains the following streets from highest to lowest capacity order:

**Community Parkway** – This main access route for the Neighbourhood Plan area includes the extension of Schooner Cove Drive to Fairwinds Drive and Powder Point Road. The Community Parkway establishes a neighbourhood “spine” and provides direct vehicular and pedestrian/bicycle connections from the Lakes District both to the Fairwinds and Schooner Cove neighbourhoods. Physical design of the Community Parkway preserves the scenic experience of the Lakes District by minimizing residential frontage along its length while preserving park/trail access and/or corridor crossings at regular intervals.

The Community Parkway includes a public shared-use pathway, providing for pedestrian and cycling connections through the Lakes District as well as the existing Fairwinds and Schooner Cove neighbourhoods, to the extent feasible.

**Neighbourhood Collector Street** – Provides access to the different neighbourhoods from the Community Parkway. Physical design of the Neighbourhood Collector Streets encourages limited direct access points (i.e. driveways) to individual homes while preserving park access and/or corridor crossings at regular intervals.

The design of Neighbourhood Collector Streets also include provision of a public shared-use pathway, providing for pedestrian and cycling connections through the Lakes District, the existing Fairwinds community and to Schooner Cove.

**Neighbourhood Local Street** – As a principal organizing element of individual homes and entire neighbourhoods, Neighbourhood Local Streets are carefully tailored with design speeds to slow traffic and fit the terrain of the Lakes District. In addition, road lengths have been minimized as a means to more effectively reduce development footprints, cluster homes and preserve natural features. Physical design of the Neighbourhood Local Streets preserves park access and/or corridor crossings at intervals not to exceed 200m.

**Green Street** – Designed to a Neighbourhood Local Street standard, Green Streets are simply road right of ways or strata streets that are instead landscaped to provide park-side living for residents, while providing for vehicular/service access via rear Laneways (see below). Green Streets strengthen the pedestrian experience by providing more generous “parkway” connections within designated Plan areas. Within the Lakes District Neighbourhood Plan, it is anticipated that Green Streets shall be maintained as part of individual strata corporations.

**Lanes** – Lanes are utilized in areas of gentle terrain, within and adjacent to Neighbourhood Commons, to support more compact housing forms, provide vehicular access along identified Green Streets and to create a more pedestrian-friendly public realm.

**Dedicated Emergency Route** – Dedicated Emergency Routes will be provided as required as part of the street network as a means to ensure connectivity within and to areas outside the Neighbourhood Plan area. The Dedicated Emergency Routes will be accessible by emergency vehicles (barricaded with removable bollards) but will otherwise serve as part of the larger public pedestrian trail system.

**Strata (Private) Street and Shared Driveway** – Strata Streets and Shared Driveways (not currently illustrated in **Schedule A3 – Street Hierarchy Plan**), will be two further types of streets providing access to individual mixed-use and/or

amenity buildings and residential homes, and will be designed through the subdivision process and subject to MoTI approval.

Detailed street designs and alignments shall be subject to review and approval by the Ministry of Transportation and Infrastructure.

### Transportation Policies

- a) Improvements to the existing road network as described in the TIS shall be implemented according to a schedule outlined with a Phased Development Agreement (PDA). The PDA will be required as a condition of zoning to identify future implementation obligations, including phasing and financing of transportation infrastructure and upgrades, and/or any other associated capital improvements.
- b) Support a pedestrian-friendly transportation network through the development of Project Specific Street Standards intended to reduce traffic speeds and establish safe pedestrian and cycling pathways.
- c) Support the implementation of Project Specific Street Standards in accordance with the Street Hierarchy Plan as shown on Schedule A3, and in consultation with MOTI.
- d) Transit-related facilities, including sufficient right-of-way width for future bus pullouts and/or shelters for designated transit stops (pullouts/bus stops) at appropriate locations (refer to Schedule A3 for potential locations) shall be provided.
- e) Minimize the number of direct access (driveway) connections along the Community Parkway to maximize vehicular safety and provide a continuous, uninterrupted shared-use pathway for non-vehicular traffic.
- f) At the time of development, the landowner shall design and construct wildlife road underpasses at locations noted in Appendix 6 for passage of beavers and small wildlife, following the recommendations of a Registered Professional Biologist (R.P.Bio) to identify the most suitable locations & design, subject to approval of the relevant federal and provincial agencies.
- g) Investigate opportunities to reduce parking requirements for residential and commercial developments that promote car sharing co-operatives and/or other forms of alternative transportation.
- h) RDN will work with the Ministry of Transportation and Infrastructure to review and pursue options for transfer of authority and boulevard management, street lighting and/or sidewalk function within a Local Service Area.
- i) Provide pedestrian through connections and Emergency Connectors (vehicular) for cul de sac road ends greater than 160m in length.
- j) Work with MoTI to ensure the provision of universally accessible pathways along major streets.
- k) Work with the appropriate government agencies to encourage sidewalks and public parking areas to be designed according to barrier free access standards.
- l) Support the construction of clear span bridges in place of open-bottomed culverts for watercourse crossings, subject to approval of relevant federal and provincial agencies.

- m) Work with ICBC and MOTI to pursue approval for the Schooner Cove and the Fairwinds UCBS to be designated areas for on-road operation of Low Speed Vehicles (LSVs).

## 4.2 Parking

Land uses within the Neighbourhood Plan area have associated requirements for on-site parking. Parking requirements for the Residential Single Dwelling, Residential Single Dwelling/Duplex and Residential Multiple Dwelling areas will be according to the RDN Land Use Bylaw. A shared-use parking agreement should be developed to facilitate parking in the area designated Community Mixed Use area to satisfy DP guidelines requirements.

### Parking Policies

- a) Parking requirements for the Residential Single Dwelling, Residential Single Dwelling/Duplex, and Residential Multiple dwelling land use designation shall be in accordance with RDN Land Use Bylaw requirement.
- b) A shared-use parking agreement shall be provided by the landowner to facilitate parking in the Community Mixed Use land use designation at the time of development permit.

## 4.3 LOCAL GOVERNMENT SERVICING

The provision of infrastructure at the level of urban servicing is essential to meet the needs of the Lakes District neighbourhood for build out as a designated urban growth area. Expansion of the existing RDN water and sanitary sewer systems as well as new stormwater infrastructure will be required. Infrastructure will aim to be cost effective, respect the environment, and conserve water and energy resources.

The Master Servicing Plans for the Lakes District Neighbourhood Plan respond to the complexity of the hillside topography and geologic condition of thin soils over bedrock. An engineering inventory of the existing infrastructure in the Lakes District neighbourhood, as well as a study of expected future demand and viability for expansion of urban services is included in *Appendix I: Technical Reports - Master Servicing Review*. While identified conceptually in the Neighbourhood Plan, specific infrastructure requirements, associated costs, phasing and funding will be determined as part of the rezoning process in a Phased Development Agreement. Detailed engineering design would be completed at the time of subdivision.

Master Servicing Plans for the Lakes District Neighbourhood Plan area consist of the following three infrastructure elements as illustrated in:

- Schedule A4 – Master Water Conceptual Plan;
- Schedule A5 – Master Rainwater (Stormwater) Conceptual Plan; and,
- Schedule A6 – Master Sanitary Sewer Conceptual Plan.

### Local Government Servicing Policy

- a) A Phased Development Agreement (PDA) will be required as a condition of zoning to identify future implementation obligations, including phasing and financing for the provision of infrastructure and/or any other capital improvements, including but not limited to conceptual designs for water supply, treatment and distribution systems, conceptual designs for sewer collection and treatment options and conceptual designs for stormwater

management, as well as associated management plans, including a Stormwater Management Plan and Hydrological Impact Assessment.

#### 4.3.1 Master Water Concept

Expansion of RDN potable water infrastructure shall be required to accommodate development in accordance with the OCP's designation of the Lakes District as a growth area within the Fairwinds UCB. Improvements to the community water system satisfy the projected functional demand to serve the number of units in the Plan area. For domestic consumption, potable water will be provided by the Regional District of Nanaimo Nanoose Bay Peninsula Water Service. Water supply is a concern and a priority for the RDN and, as such, any planned water supply will be required to be identified by the applicant at zoning amendment stage. The concept plan for water servicing for the Lakes District is shown on **Schedule A5 – Master Water Conceptual Plan**.

##### *Water Demand*

Maximum daily water demand will be calculated in accordance with RDN subdivision bylaw standards. Through the inclusion of water-conservation best practices (consistent with the Provincial Living Water Smart objectives), the Lakes District Neighbourhood Plan seeks options for residents to care for the sustainability of water and aquatic ecosystems through homeowner education, responsible irrigation practices and green building practices.

Water is sourced from a combination of groundwater wells, and surface water through the Arrowsmith Water Service (AWS). Initial phases of the Lakes District Neighbourhood Plan shall be supplied from groundwater with subsequent water supply requirements met through the AWS (additional capacity from a year round intake is not expected before 2015) and/or additional new ground water services. New wells will be developed and connected to the water system at the developer's cost.

##### *Storage Capacity*

As detailed in the *RDN Nanoose System Integration Water Study Review, February 2007*, future additional reservoir capacity of 660 m<sup>3</sup> will be needed on the Nanoose Peninsula when the system population reaches 9,250 people (in approximately year 2028). This will satisfy the full storage needs of the entire Nanoose Peninsula, including the Lakes District Neighbourhood Plan at build-out. The additional required capacity will be located at the existing Arbutus Reservoir site, with all future Nanoose development (including the Lakes District Neighbourhood Plan) and existing system users sharing in costs. Timing of construction would be in the 2015 to 2020 year range. Upsizing of the existing Arbutus Pump Station and Pressure Reducing Valve (PRV), located at the intersection of Fairwinds Drive and Anchor Drive, will also be required in conjunction with an increase in the Arbutus Reservoir size.

##### *Distribution*

Pipe sizing will be confirmed by hydraulic network analysis as design stage approval submissions are made to the RDN for each subdivision phase. All



works will be designed and constructed in accordance with the applicable RDN bylaw standards in effect at the time.

Water distribution mains are installed as extensions of the existing varying pressure zones, to suit the undulating terrain and provide appropriate operating pressures throughout the system. The pressure zones are designated by the static pressure head in metres, generally based on the normal reservoir full water level, known as the hydraulic grade line (HGL), with additional supporting flow provided through pressure reducing valves (PRVs) (which supply water to lower ground areas from a higher HGL pressure zone), or by booster pumping to a higher HGL pressure zone. Fire flow to lands above the 105 m contour will require a large pump station with fire booster pumps (BP), and backup generator, anticipated to be located centrally to the area served, alongside Bonnington Drive near its present north end.

Schedule A4 – The Master Water Conceptual Plan indicates the overall framework for water distribution to the Plan area. The Water Conceptual Plan is subject to final design at the time of subdivision, which will include detailed design on the routing and looping of water mains. Detailed planning for infrastructure upgrades and financing (including latecomer fees and/or DCC credits) will be negotiated at the time of the Phased Development Agreement.

Refer to *Appendix I: Technical Reports - Master Servicing Review* for the complete Master Servicing Report.

#### **Water Servicing Policies**

- a) Proposed development must identify adequate potable water supply prior to zoning amendment.
- b) As a condition of subdivision, development must identify a proven, sustainable, and adequate potable water supply in accordance with RDN Land Use and Subdivision Bylaw No. 500, 1987.
- c) Water supply shall be provided in a phased manner, in accordance with the Phased Development Agreement (PDA), and may include Arrowsmith Water Service planned capacity as well as additional groundwater sources.
- d) Encourage residents to employ water conservation measures in support of Team WaterSmart guidelines for indoor and outdoor conservation practices.
- e) Encourage the use of best practices in green building & landscape management according to Lakes District DPA guidelines for water conservation.
- f) Water servicing shall be in general compliance with the Master Water Conceptual Plan as shown on Schedule A4.

#### 4.3.3 Master Rainwater (Stormwater) Concept

Currently, the Lakes District Neighbourhood Plan area consists of two primary catchment areas with several smaller sub-catchment areas all eventually draining either to Enos Lake or Dolphin Lake. **Schedule A6 – Master Drainage Conceptual Plan** indicates the framework for managing rainwater.

The focus of the rainwater management concept is to incorporate best management practices to achieve a Low Impact Development. Broadly speaking, this involves meeting the guidelines of Fisheries and Oceans Canada (DFO) and the BC Ministry of Environment (MoE) for limiting the 1-in-2 year post-development runoff to pre-development levels and to maintain the pre-development hydrology and water quality at the watershed scale. Preparing an Integrated Rainwater (Stormwater) Management Plan (ISMP) at the time of rezoning, which coordinates with RDN watershed-based planning, will include a stormwater hydraulic network model to identify the exact location and frequency of discharge in the neighbourhood.

The rainwater concept is to retain and/or manage as much water on site as feasible, where geotechnical conditions permit. Incorporating and routing the remaining stormwater flow through constructed detention and infiltration facilities is the preferred method to accomplish both post-development drainage flow goals and improved water quality. Storm detention facilities will include the existing storm detention drainage system at the south end of Enos Lake, the system of stormwater detention ponds on Fairwinds golf course, and an engineered wetland at the main stormwater outlet discharging directly downstream of the north end of Enos Lake, alongside Schooner Cove Drive. Suitably sized land areas are required to be set aside for the stormwater management facilities in areas designated as civic infrastructure, and will be identified as development application submissions are made.

**Schedule A6 –Master Drainage Conceptual Plan** is intended to be a guide for the development of ISMP and is subject to final design at the time of zoning amendment application and approval by the Ministry of Transportation and Infrastructure.

##### **Rainwater (Stormwater) Management Policies**

- a) The landowner shall, according to a schedule outlined within the Phased Development Agreement (PDA), develop an Integrated Stormwater Management Plan (ISMP) and Hydrological Impact Assessment for the Lakes District using DFO and MoE BMPs, wherever practical.
- b) Ensure that the stormwater management system is designed and constructed in compliance with the BC Stormwater Guidebook and Water Balance Model.
- c) Protect hydrological function by ensuring that that post-development runoff does not exceed pre-development runoff at the watershed scale.
- d) Manage runoff as close to the source as feasible. Minimize, intercept and infiltrate runoff during construction.
- e) RDN will work with the Ministry of Transportation and Infrastructure to review and pursue potential options for transfer of

authority and stormwater management within a Local Service Area designation for the Fairwinds Urban Containment Boundary.

- f) Rainwater (stormwater) management infrastructure shall be located outside dedicated park land.
- g) Rainwater (stormwater) management shall be in general compliance with the Master Drainage Conceptual Plan as shown on Schedule A5.

#### 4.3.4 Master Sanitary Sewer Concept

The Lakes District Neighbourhood Plan area will be serviced as part of the Nanoose Community Sewer Service Planning Area. Sanitary flows can continue to be directed to the Nanoose Water Pollution Control Centre (WPCC) at the north end of Dolphin Lake until its design capacity of 1,250 units is reached.<sup>16</sup>

The RDN is considering future needs, including future capacity requirements of the Lakes District Neighbourhood Plan area at full build out and future upgrades of the existing WPCC to secondary level treatment.

**Schedule A6 – Master Sanitary Sewer Conceptual Plan** illustrates the approach for sanitary conveyance and treatment for the Lakes District Neighbourhood Plan. The sanitary drainage and treatment options pursued for the Neighbourhood Plan area will be determined as part of a community-wide servicing strategy. Final design of sanitary sewer servicing will require detailed discussion with the RDN as part of the rezoning process and through a Development Servicing Agreement.

##### Sewer Servicing Policies

- a. Require expansion of the existing sewer treatment facility in accordance with the existing development agreement between Fairwinds Development Corporation and the RDN (dated January 28, 1997).
- b. Establish a landscape buffer to mitigate noise, odour, lighting and other visual impacts of the Nanoose Pollution Control Centre.
- c. Sewage treatment capacity shall be confirmed at the time of zoning amendment and secured by the Phased Development Agreement.
- d. Sewer servicing shall be in general compliance with the Master Sanitary Sewer Conceptual Plan as shown on Schedule A6.

#### 4.3.5 Shallow Utilities

The Lakes District Neighbourhood Plan Area will be serviced with underground hydro, telephone and cable service, as well as natural gas servicing. Preliminary utility requirements and easements have been identified and the final design will take place during the subdivision stage of each phase of the development.

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<sup>16</sup> Per Servicing Agreement between Regional District of Nanaimo and Fairwinds Development Corporation, dated 1997, January 28.

Construction of the above mentioned water, sanitary, stormwater and shallow utility services has been planned for and accommodated within the road rights of way for the Neighbourhood Plan area. Additional stormwater management infrastructure shall be located outside dedicated park land with specific locations determined at the time of subdivision, in response to local terrain and other physical constraints.

#### 4.3.6 EMERGENCY PREPAREDNESS

The Neighbourhood Plan's landscape of Douglas fir forests and rocky outcrops provides significant environmental, recreational and visual amenity for the neighbourhood; however it also may present risk of wildfire. To improve community safety and reduce the risk of property damage, cooperation between the Ministry of Forests and Range, the RDN, landowners and future residents will be required.

The Regional District of Nanaimo is currently preparing a Community Wildfire Protection Plan (CWPP) for the Nanoose Bay area. The CWPP will define Wildland Urban Interface (WUI) fire hazard risk areas in the community, identify measures necessary to mitigate hazards, and outline a plan of action to implement the measures. The Lakes District development will implement the recommendations of the CWPP where they apply to the Plan area.

While wildfire hazard mitigation measures are undertaken at the time of subdivision, the Neighbourhood Plan responds to wildfire risk within the Lakes District Neighbourhood Plan by incorporating an Emergency Preparedness Strategy as shown in **Figure 6 - Emergency Preparedness Strategy**. A key component of the Emergency Preparedness Strategy is the integrated street network, ensuring multiple points of access and egress for the community. The Emergency Preparedness Strategy illustrates these major and minor access and egress routes; as well it identifies key staging areas within the Lakes District that will enable efficient response in the case of an emergency.

Two of these staging areas shall be located in the Lakehouse Centre when constructed, including the 'Marshalling Area' which would serve as a headquarters for resident communications and evacuations during a period of high-risk, and the 'Emergency Command Centre' for coordination of fire fighting services. Adequate access and staging areas for emergency response, both within the Neighbourhood Plan area and to surrounding natural areas should be considered during all development stages.

The Emergency Preparedness Strategy identifies a 100m interface zone (WUI), where residential development is located adjacent to extensively forested areas. All buildings within the Neighbourhood Plan area will consider wildfire planning best practices. These guidelines include the use of non-combustible building materials, low fire risk landscaping, and fuels management measures within the property.

As precautionary measures for wildfire in the Fairwinds urban growth area, the Lakes District Neighbourhood Plan shall consider the following:

- a. All development within the area will consider wildfire planning best practices.
- b. Until such time as the CWPP is approved, where necessary, a Wildfire Hazard Assessment in consultation with the Nanoose Volunteer Fire Department's Fire Chief and the Forest District manager will be undertaken prior to development.
- c. Encourage development within the Interface Zone area as shown on Figure 6, to follow best practices, wherever feasible (FireSmart guidelines, as approved by the Province of British Columbia).

- d. Explore collaborative efforts between the landowner, the RDN and other government agencies to mitigate current and future wildfire hazard through fuels management and mitigation, and to ensure adequate emergency response plans are in place.
- e. In order to provide the Lakes District Neighbourhood Plan area with protection from wildfire, the landowner shall provide the provision of emergency water servicing at key points where water service abuts forested areas.
- f. Identify at least two access routes for development areas, one of which may be a dedicated emergency route, ensuring access for fire and other emergency equipment, as well as, evacuation of residents.
- g. Consult with a qualified environmental professional to ensure that wildfire mitigation measures have minimal impact on biodiversity and sensitive habitats while still reducing wildfire risk, acknowledging that wildfire urban interface measures may be at odds with environmental conservation goals.
- h. RDN shall refer OCP amendment, zoning, subdivision and Development Permit applications to the local fire department for review concerning adequate water supply for firefighting; emergency access to neighbourhoods including proposed turning radii and grades; emergency access to park lands; and major traffic accesses.
- i. Best practice interface fire mitigation techniques shall be considered where they minimize impacts on the natural environment within the Development Permit Area.

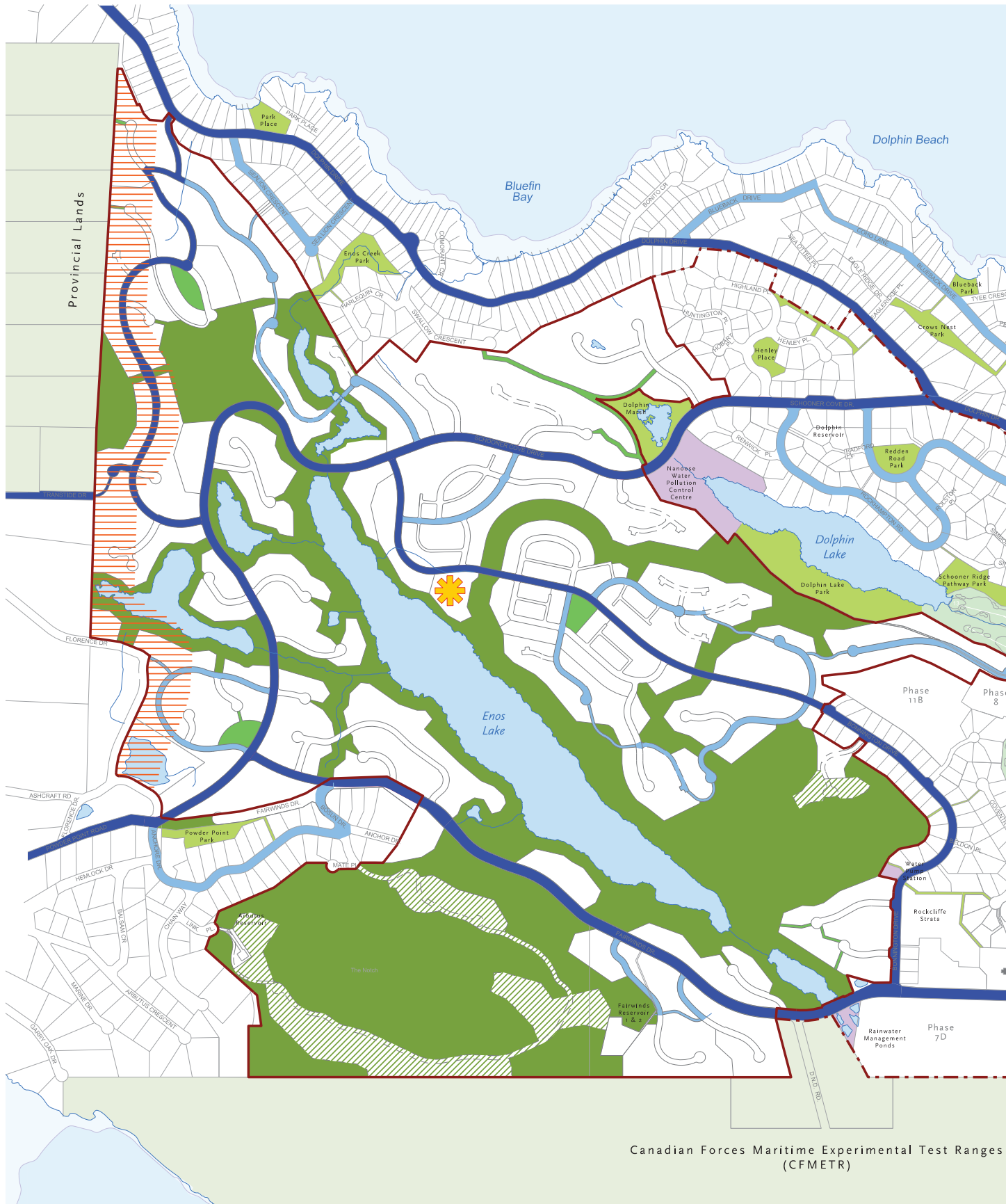
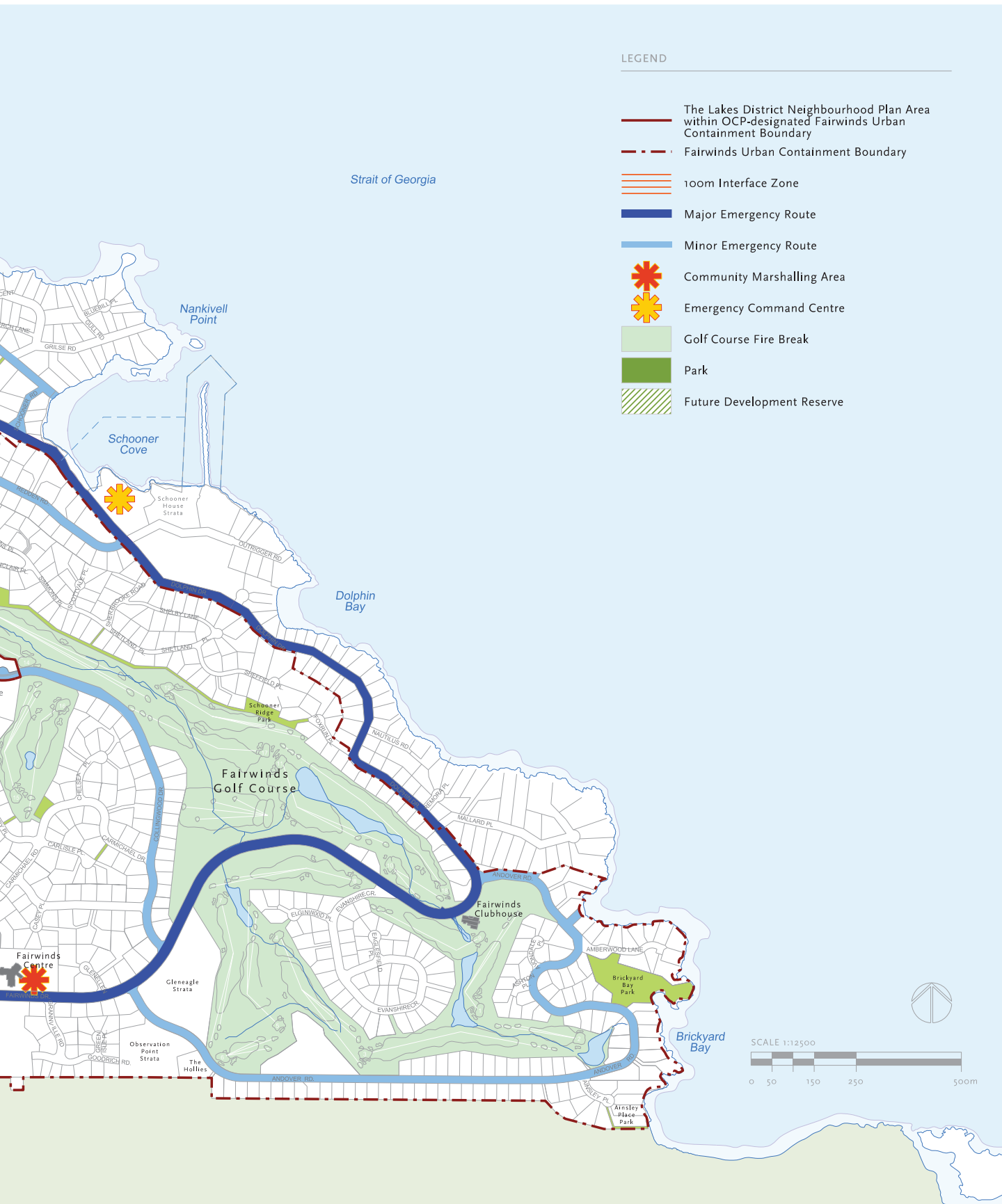


FIGURE 6 Emergency Preparedness Strategy - for illustrative purposes only



While the Lakes District landscape of Douglas Fir forests and rocky outcrops provides environmental, recreational and visual amenity for the neighbourhood, it also presents risk of wildfire. The Neighbourhood Plan responds to this hazard by establishing an integrated street network, ensuring multiple points of access and egress for the community. An Emergency Preparedness Strategy, illustrated in the figure above, identifies risk/interface areas, major and minor access and egress routes, as well as key staging areas identified within the Lakes District to enable efficient EMS response in the case of an emergency.

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## 5 DEVELOPMENT PERMIT AREAS

Section 919.1 of the Local Government Act (LGA) allows local governments to designate Development Permit Areas and guidelines within Official Community Plans. Pursuant to the LGA, Development Permit Areas shall be designated for one or more of the following purposes:

1. *protection of the natural environment, its ecosystems and biological diversity;*
2. *protection of development from hazardous conditions;*
3. *protection of farming;*
4. *revitalization of an area in which a commercial use is permitted;*
5. *establishment of objectives for the form and character of intensive residential development;*
6. *establishment of objectives for the form and character of commercial, industrial or multi-family residential development;*
7. *in relation to an area in a resort region, establishment of objectives for the form and character of development in the resort region;*
8. *establishment of objectives to promote energy conservation;*
9. *establishment of objectives to promote water conservation; and,*
10. *establishment of objectives to promote the reduction of greenhouse gas emissions.*

Accordingly, the Lakes District Development Permit Areas have been established with respect to:

- form and character for multi-dwelling and mixed-use development (DPA I);
- protection of the natural environment, including stormwater management best practices (DPA II);
- protection of development from hazardous conditions, specifically steep slopes and hillside development best practices (DPA III);
- protection of development from hazardous conditions, specifically interface fire hazard (DPA IV);
- promotion of energy conservation, water conservation and the reduction of greenhouse gas emissions (DPA V).

The designation of Development Permit Areas (DPAs) in the Lakes District Neighbourhood Plan area, in conjunction with measures established within the Plan's land use policies, will ensure that development is consistent with Regional District policies and provincial requirements.

In accordance with the Nanoose Bay OCP, development of certain lands in the Lakes District Neighbourhood Plan area will be regulated through development permits. In the Plan area, the following Development Permit Areas (DPAs) are identified:

## 5.1 LAKES DISTRICT DPA I: MULTI FAMILY & COMMERCIAL FORM AND CHARACTER

**Purpose:** To establish objectives and provide guidelines for the form and character of commercial or multiple unit residential development.

**Area:** The areas designated as Lakes District Development Permit Area I (Form and Character Development Permit Area) are illustrated in **Schedule A7 – Lakes District Development Permit Areas**.

**Justification:** Development Permit Area I (Form and Character) applies to all lands designated for multi-dwelling and/or mixed use. This DPA is established to achieve the following objectives:

- To ensure residential and commercial uses are properly integrated with its surroundings;
- To improve the character of commercial and multi dwelling unit developments;
- To encourage a high level of design and quality for commercial and multiple dwelling unit developments; and,
- To ensure appropriate facilities are provided for pedestrians, cyclists, and vehicles.

### **Guidelines:**

#### *General Design*

1. The character of Lakes District development will generally:
  - a. be in keeping with the character of the surrounding neighbourhoods;
  - b. provide a range of housing types and options;
  - c. be designed to maximize the use of the existing topography and natural landscaping;
  - d. incorporate natural building materials into the design of the buildings;
  - e. be designed to respond to local climate and situated to maximize views and natural sunlight wherever feasible; and,
  - f. encourage buildings to address the street (or greenway/other organizing structure) so as to create a well-defined public realm or strata open space.
2. The Regional District of Nanaimo shall require an applicant to submit a site plan and building elevations prepared by an architect or other qualified professional.
3. Commercial development should be primarily ground oriented and generally limited to the first and second storeys.
4. There shall be no net increase in peak rain water run-off from the site to adjoining lands.
5. Outdoor patios, landscaped commons and/or amenity areas are encouraged.

6. Street furniture, such as benches, light fixtures, bicycle racks, signage, and recycling/refuse containers, shall be incorporated in the landscape design. These shall be consistent, similar, or identical in character to the architectural character of the development and identified by type and source in the application.
7. Public open space and pedestrian walkway linkages to adjacent neighbourhoods (to complement recreational opportunities and reduce automobile dependence) shall be encouraged.
8. Development shall not be a separate "gated community" with walled or fenced enclaves and shall be integrated with and compatible with surrounding neighbourhoods.

#### *Building Siting, Height, Size & Massing*

9. Building placement and design shall consider setting buildings into the hillside and stepping upper storeys back to respect water views from the adjacent existing residences to the extent possible.
10. Buildings shall be designed to avoid presenting an overly massive appearance using interesting architectural massing, roof line and balcony/terrace design, window treatments, and landscaping to reduce monolithic forms and improve their aesthetic appearance.
11. Deep overhangs and/or covered balconies and patios adjacent to the primary living areas shall be provided where possible. Shallow overhangs are suitable if combined with shading devices such as trellises or small shading structures over windows and doors.
12. Building siting and internal spaces should be designed to promote natural ventilation, reducing reliance on mechanical means. Shading devices should be used to control solar heat gain during summer months while permitting sunlight into living space during the cold months.
13. Stepped roof lines that scale buildings from major to minor elements are strongly encouraged.

#### *Materials & Exterior Finishes*

14. The use of non-combustible building materials is encouraged.
15. Where feasible, locally produced natural building materials should be incorporated into the design without compromising the building or structures fire resistance.
16. Authentic detailing and application of exterior finishes is strongly encouraged. Unfinished building walls, including exposed basements, are not supported.
17. Colours shall be selected to compliment the natural environment, inspired by site vegetation and vistas: earth-based warm greys, browns and umbers, and moss greens as well as cooler colours inspired from the sea and sky, such as pale blues and greys. Lighter tones can be used to provide accent trim and in base areas, projecting elements and entries. Bolder colours will be acceptable, as long as, the overall palette is complementary and that the colours do not clash with the surroundings.

18. Dwelling units should be designed to allow residents privacy as well as a sense of community such that each unit has at least one private outdoor space with access to or views of adjacent semi-public spaces.

#### *Parking and Loading*

19. Underground parking for residential uses is encouraged, where feasible.
20. Parking areas should be integrated with the topography where feasible consisting of a series of smaller parking areas, and screened through landscape design to establish a pedestrian-friendly environment while reducing the visual impact of surface parking areas.
21. Where possible, parking and loading areas shall be to the rear of the front-face of buildings.

#### *Landscaping and Screening*

22. The Regional District of Nanaimo shall require the applicant to submit a Landscape Plan prepared by a qualified Landscape Architect or equivalent professional which meets the British Columbia Landscape Standard and satisfies the following objectives:
  - a. to use a variety of native or similarly hardy, drought tolerant deciduous and evergreen plant species that are best suited to the site specific growing conditions;
  - b. to minimize water consumption through means such as micro-irrigation and xeriscaping;
  - c. to provide visual separation from and compatibility with surrounding single dwelling uses;
  - d. to improve the aesthetic appeal of the development;
  - e. to assist in the safe movement of pedestrians throughout the site;
  - f. to reduce the amount of impervious surfaces on the site;
  - g. to compliment the development and surrounding uses;
  - h. to preserve natural character; and,
  - i. to establish or enhance habitat values on the development site where appropriate.
23. The Landscape Plan must be drawn to scale and show the type, size and location of proposed landscaping and shall be submitted with the development permit application.
24. Any landscaped area adjacent to a watercourse, or environmentally sensitive feature shall be reviewed by a Qualified Environmental Professional (QEP) and shall establish or enhance habitat values on the development site.
25. Low impact stormwater control measures shall be integrated into paving treatments and landscape design to encourage detention and improve water quality.

26. All landscaping shall require the following minimum depth of topsoil or amended organic soils on all landscaped areas of a property:
  - a) shrubs – 45 cm;
  - b) groundcover and grass – 30 cm; and
  - c) trees – 30 cm around and below the root ball.
27. Where irrigation is required to maintain proposed landscaping, it shall be designed and installed by an Irrigation Industry Association of British Columbia certified irrigation designer.
28. Garbage recycling containers, utilities, service kiosks, meters, elevator housing, exhaust elements, satellite dishes, etc. shall be screened with a combination of landscaping and fencing and gated to a minimum height of 2.0 metres. Any outside storage areas shall be located to the rear of buildings unless adequately screened.
29. Chain link fencing shall be used only when screened by landscaping. Decorative fences are encouraged matching the materials used for the principal building.
30. Plant species used in replanting, restoration and enhancement shall be selected to suit the soil, light and groundwater conditions of the site, should be native to the area, and be selected for erosion control and/or habitat values as needed.
31. Retention of natural vegetation is encouraged.
32. Where appropriate, establish landscape buffers that create a natural transition between the public, semi-public and private uses – including the Lakehouse Centre and adjacent residential areas – through the use of hard and soft landscaping, such as areas containing layers of shrubs, trees and low walls where required.
33. Exposed foundation walls – including parkade structures and/or exposed basements – shall be visually screened with landscaping.

*Pedestrian and Cyclist Considerations*

34. Pedestrian sidewalks and pathways should provide direct connections between building entrances, parking areas and sidewalks/pathways of adjacent streets.
35. Where appropriate, pedestrian facilities shall be provided to separate pedestrian and traffic circulation on a site and minimize vehicle/pedestrian conflicts.
36. Safe pedestrian and cycling routes shall be provided through and to commercial or multi-unit residential developments and shall link to existing neighbourhoods, parks and the access points to the Lakes.
37. All internal pedestrian walkways shall be distinguished from driving surfaces through the use of a clearly delineated pathway or durable, low maintenance surface materials such as pavers, bricks, or concrete to enhance pedestrian safety and comfort, as well as the attractiveness of the walkways.
38. Bicycle parking facilities should be provided at grade near the primary building entrances.

39. Require that sidewalks and parking areas be designed according to barrier free access standards.
40. Walls, fences, shrubs, grade changes or other site features should not obscure vehicle driver vision of pedestrian or bicycle routes or provide for concealment.
41. Where appropriate, cycling facilities should be provided through safe circulation paths, “end of trip” facilities and sheltered locations for bicycle storage/security.
42. Street design shall provide pedestrian amenities such as benches, human-scaled lighting, street trees, recycling/refuse receptacles and bicycle racks;
43. Continuous weather protection over main entrances and over building facades shall be encouraged.

#### *Site Illumination and Signage*

44. Signage shall complement the design of buildings and structures and be grouped in multiple development sites. The use of natural materials is encouraged.
45. The use of indirect and/or accent lighting on signage is encouraged.
46. Lighting should be designed in accordance with “dark sky” guidelines to improve safety, minimize glare and preserve the ambiance of the night sky. The use of back-lit signage and LED or video signage is not supported.
47. All new, replacement and upgraded exterior lighting in existing and proposed developments shall use Full-Cut Off/Flat Lens (FCO/FL) luminaries as required for roads, parking, loading and pedestrian areas. Exterior building lighting will also be required to use FCO lighting fixtures.
48. The size, location and design of freestanding signage shall be architecturally integrated with the overall design of the buildings and landscaping. The design of fascia signs containing individual business signage shall be integrated into the design of the building.
49. No roof top signs shall be permitted. Multi-tenant buildings shall provide combined tenant signage.
50. Signage should be visually unobtrusive; particular emphasis should be given to signage which is aesthetically pleasing and requires a minimal amount of lighting or boldness to be effective

#### **Exemptions:**

1. A development permit shall not be required to construct, renovate or alter a single dwelling unit or building/structure accessory to a single dwelling unit.
2. A development permit shall not be required to construct an accessory building to a multiple dwelling unit development where the proposed accessory building is 10 m<sup>2</sup> or less in size and 3 m or less in height.
3. A development permit shall not be required for interior alterations or repairs.
4. A development permit shall not be required for the subdivision of land.

## 5.2 LAKES DISTRICT DPA II: NATURAL ENVIRONMENT

**Purpose:** The Natural Environment Development Permit Area is designated pursuant to section 919.1(1)(a) of the Local Government Act for the protection of the natural environment, its ecosystems, and biological diversity.

**Area:** The areas designated as Lakes District Development Permit Area II (Natural Environment) are illustrated in Schedule A7.

Given the extent to which best practices have been applied at the Neighbourhood Plan level, the DPA II designation applies to lands within 30m of surveyed Garry oak meadows and significant ESA's located within the Regional Park boundary, as identified in Schedule A7.

**Justification:** The Lakes District Neighbourhood Plan was developed through a comprehensive investigation, planning and design process. A fundamental component in the development of the Plan was the use of an ecosystem-based approach to the conservation of environmental integrity, in accordance with *Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia* (MOE 2006). Furthermore, the Lakes District Neighbourhood Plan and its regulatory policies were developed in accordance with the findings of an Environmental Impact Assessment (EIA) and its specific Recommended Commitments, prepared by Registered Professional Biologists.

With respect to protection of the natural environment, Terrestrial Ecosystem Mapping and biophysical investigations have identified key environmental features within the Lakes District Neighbourhood Plan area, including but not limited to Streamside Protection and Enhancement Areas, Garry oak meadows and Environmentally Sensitive Areas (refer to the Lakes District Neighbourhood Plan Appendix 1 – Section 2: Environmental Review) and protected the vast majority of these features through dedication as Regional Park.

### **Guidelines:**

1. A development permit is required for the following activities unless specifically exempt:
  - a. removal, alteration, disruption or destruction of natural features, including mature and native vegetation;
  - b. disturbance of soils, including grubbing, scraping, and removal of top soils;
  - c. construction or erection of buildings and structures;
  - d. creation of non-structural impervious or semi-pervious surfaces; and,
  - e. subdivision as defined in the Land Title Act or the Strata Property Act.
2. Where development or the alteration of land is proposed within the Natural Environment DPA II, the report (prepared by an R. P. Bio in its evaluation of the proposal) shall consider the following site-specific natural features, functions, and conditions that support wildlife and unique ecosystems:
  - a. location of vegetation, trees, snags, and root systems;
  - b. location of rare and uncommon species and plant communities;
  - c. soils and soil conditions (moisture, nutrients and permeability);

- d. location of bird and other wildlife and their habitats, such as nesting and breeding areas;
  - e. maintenance of an effective visual and sound (natural vegetated) buffer around eagle and heron nesting sites or the sensitive ecosystem;
  - f. maintenance of linkages with adjacent sensitive ecosystems to minimize fragmentation;
  - g. topography and relative location of features on neighbouring properties; and,
  - h. hydrology and impacts to adjacent areas with respect to post-development drainage regimes.
3. The report set out in number 2 above shall include recommendations to lessen impacts and may include candidate areas for conservation covenants and procedures for covenant monitoring.
  4. Conduct pre-construction plant species at risk surveys by a qualified vegetation ecologist/botanist to identify plants that can be avoided or salvaged.
  5. All development proposals should be designed in substantial compliance with the guidelines contained Section 3 (Site Development & Management) of the document: "Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia" published in March 2006 by the Ministry of Environment, taking into account provisions which have been applied at the Neighbourhood Plan level.
  6. All development within the Development Permit Area must be in compliance with the Riparian Areas Regulation.
  7. A qualified environmental professional (QEP) must be retained at the expense of the applicant for the purpose of preparing a report pursuant to Section 4(2) of the Riparian Areas Regulation (RAR) and the RAR Assessment Methodology Guidebook. The report must be electronically submitted to the Ministry of Environment (MOE), Fisheries and Oceans Canada (DFO), and a hard copy must be provided to the RDN.
  8. A Development Permit shall not be issued without notification from the MOE and the DFO that they have been notified of the proposed development and provided with an acceptable copy of the QEP assessment report or having received evidence of the Minister of Fisheries and Oceans Canada approval under the authority of Section 4(3) of the RAR.
  9. Minimize encroachment into identified SPEAs for the purposes of designated street crossings as specified in **Schedule A3 – Street Hierarchy Plan**, in accordance with transportation policies as defined in Section 4.1 of this Plan, and subject to approval of relevant federal and provincial agencies. (already a policy within Section 4.1)
  10. Landowners are encouraged to consider integrated pest management practices for the landscape planning and maintenance of common lands following environmentally-friendly practices to control pests without the use of toxic chemicals.



11. Development or subdivision of land should be designed to:
  - a. replicate the function of a naturally vegetated watershed;
  - b. maintain the hydraulic regime of surface and groundwater and pre-development flow rates; and,
  - c. not introduce or remove materials where it would cause erosion of or the filling in of natural watercourses or the shoreline.

**Exemptions:**

Where an owner is proposing to alter the land, commence a subdivision, construct or alter a building or structure within this Development Permit Area, the following activities are exempt from requiring a development permit:

1. Development or alteration of land proposed to occur outside the designated Development Permit Area as shown on Schedule A7, as determined by a Qualified Environmental Professional.
2. Development outside of the Streamside Protection and Enhancement Area (SPEA) where notification of an assessment report prepared in accordance with Section 4(2)(a)(i)(ii) of the Riparian Areas Regulation Assessment Methods has been received by the Regional District of Nanaimo and there are no measures required to protect the SPEA;
3. Subdivision of land where a covenant under Section 219 of the Land Title Act is registered against the title to the land and includes provisions which protect the natural environment for which the Development Permit Area and ensures no disturbance of the DPA.
4. Maintenance of existing landscaping and planting native trees, shrubs, or ground cover and the maintenance or repair of legal or nonconforming buildings and structures within the existing footprint. (Building Permit may be required)
5. The removal of invasive plants or noxious weeds on a small scale within the development permit area including; but not limited to: Scotch broom, Himalayan blackberry, morning glory, and purple loosestrife, is permitted provided measures are taken to avoid sediment or debris being discharged into watercourses and the area is replanted with native species.
6. Minor additions to existing buildings and structures to a maximum of 25% of the total floor area of the existing building or structure, provided that the proposed addition is not situated closer to the environmentally sensitive feature for which the Development Permit Area has been identified, than the existing building or structure.
7. Construction of a single trail subject to the following:
  - a. the trail must be no greater than a maximum 1.5 metres in width;
  - b. the trail's surface must be pervious but may be constructed with materials that limit erosion and bank destabilization (certain structures may require a building permit);
  - c. the trail provides the most direct route of feasible passage through the Development Permit Area;
  - d. sensitive habitat will not be impacted by the presence of the trail;

- e. the ground must be stable, i.e. erodible banks or other erosion prone areas must be avoided;
  - f. no trees, greater than 5 metres in height and 10 centimetres in diameter, are to be removed. If limbing, pruning and topping of trees must occur, a minimum of 60% of the original crown of any tree should be retained to maintain tree health and vigour; and
  - g. no vehicles are permitted.
8. Emergency procedures to prevent, control, or reduce erosion, or other immediate threats to life and property including:
- h. emergency actions for flood protection and erosion protection;
  - i. clearing of an obstruction from bridge, culvert, or drainage flow; repairs to bridges and safety fences in accordance with the Federal *Fisheries Act and Wildlife Act*; and
  - j. removal of hazardous trees that present a danger to the safety of persons or are likely to damage public or private property in accordance with the Federal *Fisheries Act and Wildlife Act* as determined by a certified arborist.
9. Restoration works under the supervision of a qualified professional. Any activity within the Development Permit Area, requires compliance with Provincial and Federal legislation, and notification to the Regional District of Nanaimo.

### 5.3 LAKES DISTRICT DPA III: HAZARDOUS CONDITIONS – STEEP SLOPES

**Purpose:** To protect development from hazardous conditions with specific consideration for steep slopes.

**Area:** This Development Permit Area is applicable to those lands within the Plan Area with a natural grade greater than 30 percent, as generally identified on Schedule A7.

**Justification:** Hazardous lands include steep slopes adjacent to watercourses and along lake bluffs and rocky outcrops, as well as fire hazard. The subdivision, development of land, or removal of vegetation in these areas may destabilize the area, cause environmental damage, and pose potential for loss of life and property. In response to these risks and conditions, the Hazardous Conditions DPA III is established to protect life and property from hazardous conditions.

#### **Guidelines:**

A development permit is required for the following activities unless specifically exempt:

1. Alteration of land, placement of fill, disturbance of soils, including grubbing, scraping, and removal of top soils;
2. Construction or erection of buildings and structures;
3. Creation of non-structural impervious or semi-pervious surfaces; and
4. Subdivision as defined in section 872 of the Local Government Act.

Where development or the alteration of land is proposed within the Hazardous Conditions DPA III, the evaluation of the proposal shall be subject to the following:

1. The applicant will work with the RDN to consider feasible variances to the land use and subdivision bylaw to minimize encroachment into the Development Permit Area.
2. An assessment of the natural hazard by a qualified professional as recognised by the BC Professional Engineers and Geoscientists shall be required to determine if the site is safe for the intended use and to provide recommendations to ensure that the proposed development is protected from the natural hazard. The assessment must include a statement from the engineer or other qualified professional that states that in their opinion the property is safe for the intended use.
3. The Regional District of Nanaimo will require a Section 219 covenant to register the qualified professional's report and to save the RDN harmless from all losses or damages to life or property as a result of the hazard.
4. Where the possibility of an impact(s) exists, the RDN may require an applicant to supply a drainage, sediment, and/or erosion plan complete with recommendations for implementation prepared by a professional engineer or a person with similar qualifications, to the satisfaction of the Regional District of Nanaimo.
5. Where the possibility of an impact(s) exists, the RDN may require the applicant to supply a re-vegetation plan to the satisfaction of the RDN.
6. Development or subdivision of land should be designed to:

- a. maintain the hydraulic regime of surface and groundwater and pre-development flow rates at a watershed scale;
  - b. not interfere with groundwater recharge; and,
  - c. not introduce or remove materials where it would cause erosion of or the filling in of natural watercourses and/or wetlands.
7. Where development in the Hazard Lands Development Permit Area is deemed necessary, the development will:
- a. be designed to ensure that development can withstand the hazard and that the property is safe for the use intended;
  - b. take a form that minimizes the area of encroachment into and impact on the Hazard Lands Development Permit Area; and,
  - c. be conducted at a time of year and use construction methods that minimize the impact on the Hazard Lands Development Permit Area.

**Exemptions:**

The following activities are exempt from requiring a development permit:

- 1. Emergency procedures to prevent, control, or reduce flooding, erosion or other immediate threats to life and property including:
  - a. emergency erosion protection works;
  - b. clearing of an obstruction from a bridge, culvert, or drainage flow;
  - c. the planting of native vegetation for the purpose of bank stabilization; or,
  - d. repairs to bridges and safety fences.
- 2. The removal of hazardous trees (in accordance with the recommendations contained in a report prepared by a certified Arborist) that present an immediate danger to the safety of persons or are likely to damage public or private property.
- 3. Construction repair and maintenance of works by the RDN or its authorized agents and contractors.
- 4. The construction of a fence.
- 5. A development permit is not required on a property where the hazard is due to steep slopes and where prior to the issuance of a building permit a geotechnical report has been prepared to the satisfaction of The Regional District and has been registered on title of the land as a section 219 covenant that includes a safe harmless clause for the RDN.
- 6. In the case of an application to subdivide, a development permit is not required where:
  - a. minimum lot areas are met exclusive of the hazard area shown on Schedule A7;
  - b. no development activities (such as grading, clearing, trenching, installation of pipes, etc.) relating to the creation of lots or provision of services for those lots will occur within the Development Permit Area.

#### 5.4 LAKES DISTRICT DPA IV: HAZARDOUS CONDITIONS – INTERFACE FIRE HAZARD

Purpose: To protect development from hazardous conditions with specific consideration for interface fire hazard.

Area: This Development Permit Area is applicable to those lands within the Plan Area adjacent to large forested areas, as generally identified on Schedule A7.

**Justification:** The Lakes District Neighbourhood Plan area abuts several large land parcels which are topographically steep, heavily forested, and/or have limited, or no municipal water supply. Properties identified on Schedule A7 have been determined to be at risk for interface wildfires. As a result, they have been designated as being within a Development Permit Area in order to establish guidelines that are intended to reduce the risk of hazard to persons and property as a result of wildfire.

##### **Guidelines:**

A development permit is required for the following activities unless specifically exempt:

1. Alteration of land, placement of fill, disturbance of soils, including grubbing, scraping, and removal of top soils;
2. Construction or erection of buildings and structures;
3. Creation of non-structural impervious or semi-pervious surfaces; and

Where development or the alteration of land is proposed within the Hazardous Conditions DPA III, the evaluation of the proposal shall be subject to the following:

1. Buildings shall be constructed in accordance with the following:
  - a. All roofing material and insulation requirements must meet the Class “B” fire rating requirements contained within the current B.C. Building Code.
  - b. Building design and construction shall generally be consistent with the standards in the National Fire Protection Association (NFPA) Standard 1144 - Standard for Protection of Life and Property from Wildfire.
  - c. All eaves and attic vents shall be screened using 3 mm non-combustible wire mesh at a minimum to prevent the entry and accumulation of combustible materials and windblown embers.
2. Any building or structure used to store wood shall not be permitted to be located within 10 metres of the dwelling unit/principal building unless it is constructed in accordance with guideline 2 a), b) and c) above.
3. Where a Registered Professional Forester, Registered Forest Technician or Registered Professional Engineer, qualified by training or experience in fire protection engineering, has undertaken an assessment of a proposed development and determined the fire hazard to be low provided specific conditions are met, the requirements of these guidelines may be relaxed provided the development is carried out in accordance with such conditions.

**Exemptions:**

The following activities are exempt from requiring a development permit:

1. A property where the hazard is interface fire and a development permit has been issued as part of a previous subdivision.
2. Installation of fences.
3. Cutting down of hazardous trees that present an immediate danger to the safety of persons or are likely to damage public or private property.
4. Construction of a trail through the Development Permit area.
5. Agricultural activity.
6. Construction of stand alone gazebos, playhouses, tool and/or garden sheds having a gross floor area not exceeding 10m<sup>2</sup>.
7. Construction of additions that are 50 m<sup>2</sup> or less to existing buildings unless more than 50 % of the existing roof will be replaced as part of the construction.
8. Subdivision.

5.5 LAKES DISTRICT DPA V: ENERGY CONSERVATION, WATER CONSERVATION, AND THE REDUCTION OF GREENHOUSE GASES

**Purpose:** To promote energy conservation and energy efficiency in new development. To promote water conservation and water use efficiency in new development. To promote the reduction of greenhouse gases in new development.

**Area:** This Development Permit Area is applicable to all lands as identified on **Schedule A7 – Lakes District Development Permit Areas.**

**Justification:** Local government authority over land use can play a vital role in addressing energy conservation, water conservation and reduction of greenhouse gas emissions. With respect to planning for a more sustainable future within the Lakes District, energy and water conservation play a critical role to the long-term functional health of the community, while reduction of greenhouse gas emissions acknowledges our responsibility to act locally to address the threats of climate change. The Lakes District DPA V area is established to improve performance in the land use planning and physical design with respect to energy and water conservation and the reduction of greenhouse gas emissions.

**Guidelines:**

1. Retention of natural vegetation is encouraged and introduced landscaping shall use native plantings, drought tolerant species, and xeriscaping standards, where feasible.
2. All new development should be designed to conserve water by:
  - a) minimizing impervious surfaces;
  - b) maintaining the hydraulic regime of surface and groundwater and pre-development flow rates at the watershed scale; and
  - c) not introducing or removing materials where it would cause erosion of or the filling in of natural watercourses and/or wetlands.
3. Design sites and buildings to use best practice rain water management and water conservation techniques.
4. Encourage the use of green rooftops, balconies, patios, courtyards and gardens to moderate effects of building temperature (heat island effect).
5. The use of energy efficient building materials, techniques, and practices that reduce the amount of energy consumption shall be encouraged.
6. Comprehensive development proposals that consider the full life cycle of input materials and process by-products as well as seek to minimize energy and raw materials use, minimize waste, and build sustainable economic, ecological and social relationships (eco-industrial networking) shall be encouraged.
7. Design new buildings to adapt to a range of uses to extend the life span and usefulness of buildings.
8. Geo-exchange district energy systems are encouraged.

9. To the extent feasible, developments should be designed to take advantage of sun exposure to reduce winter heating and natural ventilation to reduce summer cooling.

**Exemptions:**

The following activities are exempt from requiring a development permit:

1. Construction, renovation or alteration of a single dwelling unit or building or structure accessory to a single dwelling unit.
2. Construction of an accessory building to a multiple dwelling unit development where the proposed accessory building is 10 m<sup>2</sup> or less in size and 3 m in height.
3. Alterations or reparations to interior spaces.
4. Subdivision of land within Residential – Single Dwelling & Single Dwelling/Duplex land use designation.



## 6 IMPLEMENTATION

Successful implementation of the Lakes District Neighbourhood Plan will require a series of actions to be undertaken by the RDN and landowners.

The RDN will assist in the implementation process by outlining requirements for landowners as prescribed by this Plan, assessing impacts of the Neighbourhood Plan development on RDN services, and processing of associated rezoning applications, development permits, and other applications.

Landowners will participate in the implementation process through the creation of land development plans and the submission of rezoning and development applications, the negotiation of the Phased Development Agreement, preparation of reports, studies, and assessment of development servicing agreements, and the financing of certain development infrastructure.

### 6.1 REGULATORY REQUIREMENTS

The Lakes District Neighbourhood Plan will require amendments and revisions to a number of Regional District of Nanaimo bylaws and regulations. In addition to amendments to the OCP, amendments to bylaws, policies and/or guidelines may be required for implementation of the Lakes District Neighbourhood Plan to address:

- a. The incorporation of "Dark Sky" Lighting Guidelines into a Subdivision and Development Servicing Bylaw;
- b. The construction and ongoing maintenance of sidewalks;
- c. The Exploration of revised "persons per unit (ppu)" assumptions for water demand calculations to reflect local demographics (fewer persons per household) and smaller unit types; and
- d. The landscaping requirements of bylaw No. 500, 1987.

### 6.2 ADJACENT LAND USE INTERFACE

To provide for the orderly development of the Neighbourhood Plan, the following land use interfaces with neighbouring lands have been identified:

#### 6.2.1 Canadian Forces Maritime Experimental Test Ranges (CFMETR)

The RDN shall consult with CFMETR on the design of any adjacent residential development and landscaping to adequately incorporate elements which address the privacy and security concerns of the Canadian Forces and reduce noise or other conflicts for residents.

#### 6.2.2 Adjacent Neighbourhoods

The Plan will respect the form and character of adjacent existing residential neighbourhoods through corresponding adjacent housing types and forms, providing transition to higher density areas or retention/establishment of natural areas as landscape buffers.

### 6.2.3 Provincial Lands

In the northwest areas of the Neighbourhood Plan, landscape conservation covenants on individual residential lots adjacent to Provincial lands may be required to ensure appropriate transitions.

The Park and Trail system will include the potential for designated trail connections to Provincial lands should the Province find it desirable to provide recreational connections to the Plan area.

## 6.3 DEVELOPMENT PHASING

The development of the Lakes District Neighbourhood Plan will require a general schedule to ensure that development occurs in an orderly manner in conjunction with the provision of full urban services.

Owing to the size and complexity of the Neighbourhood Plan area, the phasing strategy will be for development to occur over several general stages, with timing and precise sequencing to be determined, relative to market demand as illustrated in **Figure 7 - Conceptual Phasing Plan**.

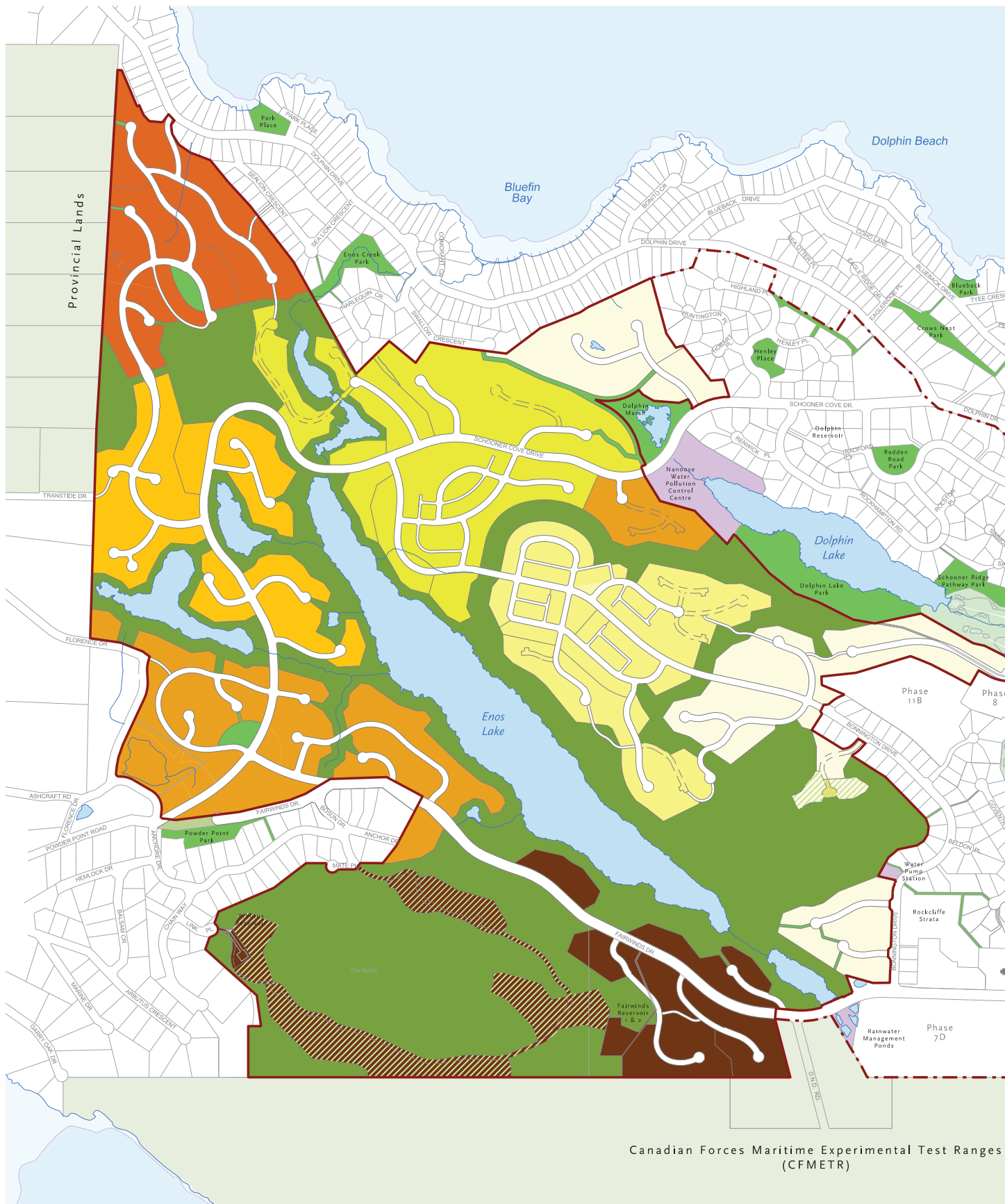
Sequencing for the construction of the road network, water supply, sanitary sewer, stormwater management, public parks and utility systems for the neighbourhood will proceed according to the terms finalized in a Phased Development Agreement, to be completed at the time of rezoning.

## 6.4 PRE- AND POST-CONSTRUCTION

In addition to the orderly phasing of development in accordance with policies as described within this Plan and to be detailed within a Phased Development Agreement (as a condition of zoning), the following policies outline additional requirements (as detailed within the Recommended Commitments of the Environmental Impact Assessment and not already reflected elsewhere within the Plan) to guide the implementation of the Plan through the construction phase:

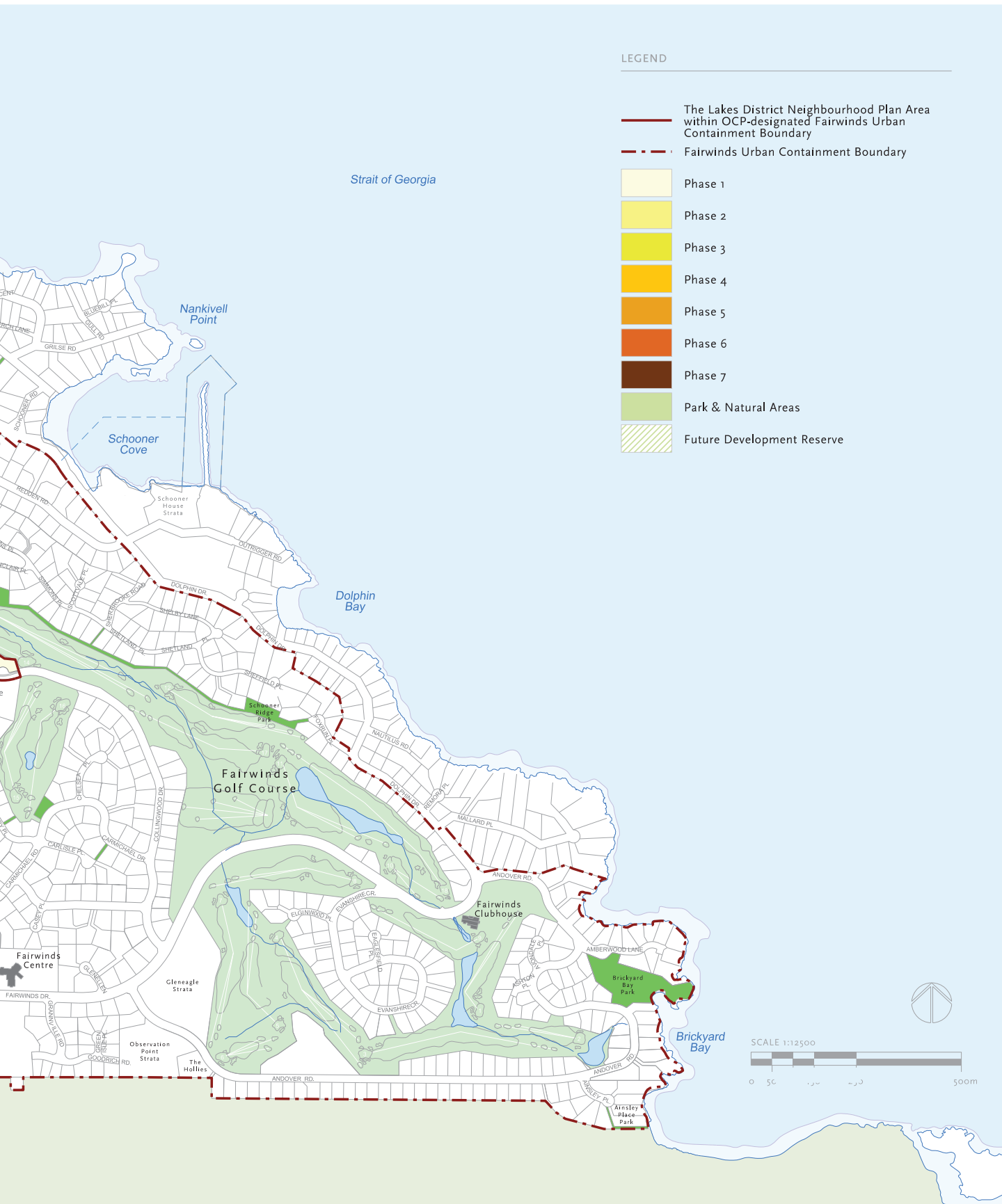
1. Conduct and submit a pre-construction stage RAR assessment (“Construction RAR”) to define the protection methods for the SPEAs. Conduct an arborist's assessment of tree retention and management in the SPEAs for input to the Construction RAR assessment.
2. Conduct an Archaeological Impact Assessment in areas of potential risk specified in the AOA (as may be refined through focused Preliminary Field Reconnaissance work during the detailed design stage) based on the detailed design of the development phase to identify any required mitigation.
3. Develop a Construction Environmental Management Plan (CEMP) with an environmental professional that includes:
  - a. erosion and sediment control plan;
  - b. spill contingency and response practices;
  - c. terrain management practices;
  - d. fire protection practices;
  - e. tree management and vegetation restoration measures;

- f. protection measures for works near water, riparian areas and Garry oak meadows;
  - g. any mitigation measures from plant species at risk surveys;
  - h. any mitigation measures from the Archaeological Impact Assessment;
  - i. construction schedule that avoids or limits activities during sensitive environmental periods (as set forth under policies 7 and 8 below);
  - j. water quality parameters and targets for sediment control and other substances used around waterbodies;
  - k. requirements for vegetation clearing to avoid destruction or disturbance of bird nests, including pre-clearing nest surveys if during applicable nesting season;
  - l. practices for amphibian salvages where necessary; and
  - m. construction traffic management.
4. Include the CEMP in construction tender documents and require construction contractor adherence to the CEMP as part of contractual obligations.
  5. Engage a qualified Environmental Monitor to monitor and report on the construction activities' adherence to the CEMP, regulations and other environmental best management practices.
  6. Under the guidance of a wildlife biologist under a Wildlife Act permit from MOE, salvage amphibians prior to construction in and around wetlands, creeks and riparian habitats in areas identified by a wildlife biologist.
  7. Avoid vegetation clearing outside the April 1 to July 31 general bird nesting season, or conduct pre-clearing nest surveys by a qualified wildlife biologist according to MOE/CWS protocol to identify any mitigation required.
  8. Avoid vegetation clearing outside the January 1 to July 31 raptor (owl, eagles, hawks, etc) nesting season or conduct raptor nest surveys according to MOE protocol to identify any mitigation (nest avoidance/protection) required.
  9. Identify the number of wildlife trees (under supervision by a biologist) that are planned for removal and compensate in nearby protected areas with nest boxes and/or other wildlife habitat restoration (e.g., wildlife tree creation following advice from an arborist) based on a biologist's assessment of the highest and best use of restoration effort on a site-by-site basis.
  10. Restore disturbed riparian habitat following a vegetation restoration procedure prepared by a qualified vegetation ecologist.
  11. Develop an environmental education initiative for recreational users which includes education on the locally sensitive areas and their value, provides direction on methods of protection and promotes involvement in stewardship activities.
  12. Prior to completion of construction, develop and promote an Environmental Homeowner's Manual which includes guidance for ecologically responsible:
    - landscaping (Garry Oak Gardener's Handbook);
    - water conservation;
    - recreation;
    - respect for local sensitive areas; and
    - participation in community-based stewardship.



Canadian Forces Maritime Experimental Test Ranges (CFMETR)

FIGURE 7 Conceptual Phasing Plan - for illustrative purposes only



Future build-out of the designated growth area will proceed in an orderly manner in conjunction with the provision of full local government services. Owing to the size and complexity of the Neighbourhood Plan area, development will occur over seven general stages corresponding to an anticipated 15-25 year build-out. The phased construction of the road network, water supply, sanitary sewer, stormwater management, public parks and utility systems for the neighbourhood will proceed according to terms finalized in a Development Servicing Agreement, following rezoning.












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Schedule A1  
LAND USE  
DESIGNATIONS

JANUARY, 2011

LEGEND

-  OCP Urban Containment Boundary
-  The Lakes District Neighbourhood Plan Area within the OCP Urban Containment Boundary

	41.5%	Regional Park	118.55 ha (191.93 ac)
	1.0%	Community Park	2.74 ha (6.77 ac)
	1.0%	Future Development Reserve	11.04 ha (127.28 ac)
	23.9%	Single Dwelling	68.20 ha (168.91 ac)
	16.2%	Single Dwelling Duplex	46.36 ha (114.35 ac)
	2.7%	Multiple Dwelling	7.72 ha (19.08 ac)
	0.7%	Community Mixed Use	1.92 ha (4.74 ac)
	0.3%	Lakehouse Centre	0.92 ha (2.27 ac)
	0.5%	Civic Infrastructure	1.37 ha (13.19 ac)
	9.4%	Public Road ROW	24.99 ha (61.69 ac)
	100%	285.81 ha / 706.23 ac	

Note: All land use areas and percentages are approximate. Areas and boundaries are subject to refinement through more detailed site design and engineering at the time of rezoning and subdivision.

Select Land Uses outside the Neighbourhood Plan Area

-  Civic Infrastructure
-  Community Park
-  Fairwinds Golf Course



Canadian Forces Maritime Experimental Test Ranges (CFMETR)

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# Schedule A2 PARK AND ENVIRONMENTAL NETWORK PLAN

JANUARY 2011

LEGEND

The Lakes District Neighbourhood Plan Area  
within OCP-designated Fairwinds Urban  
Containment Boundary

- Fairwinds Urban Containment Boundary

- Regional Park  
116.55 ha (292.93 ac)
- Community Park  
2.74 ha (6.77 ac)
- Development Reserve for Potential Park Expansion  
11,094 ha (27,283 ac)
- Multi-Use Pathway  
3.0m Paved Surface  
5,400 m
- Sidewalk  
1.8m Paved Surface  
14,000 m
- Existing Sidewalk  
1.5m Paved Surface
- Walking, Hiking &  
Bicycling Trails  
0.7m to 1.5m Crushed Surface  
18,900 m
- Provincial Alterations Backwalk Alignment  
(positions may be floating)
- Lakehouse Community Centre
- Eros Lake 'Blue Way' & Docks
- Park Staging Area
- Destination Viewpoints
- Designated Street Crossing

Note: All trail locations and types are approximate,  
intended for planning purposes only. Final  
alignments are subject to geotechnical feasibility  
at time of construction.



Canadian Forces Maritime Experimental Test Ranges  
(CFMETR)

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











Schedule A3  
STREET HIERARCHY  
PLAN

JANUARY 2011

LEGEND

The Lakes District Neighbourhood Plan Area  
within OCP-designated Fairwinds Urban  
Containment Boundary

-  Fairwinds Urban Containment Boundary

-  Regional Park
-  Community Park
-  Neighbourhood Development Areas
-  Development Reserve for Potential Park Expansion
-  Public Streets
-  Existing Major Street Network
-  Potential Street Upgrade
-  Community Parkway
-  Community Parkway Transition Area
-  Neighbourhood Collector
-  Neighbourhood Local
-  Green Streets (Potential)
-  Lanes
-  Emergency Connector
-  Private Streets
-  Strata Street

Notes:  
Street cross sections and potential areas  
are to be determined in conjunction  
with M&T.  
All road alignments are approximate. Exact  
locations to be finalized at time of subdivision



Canadian Forces Maritime Experimental Test Ranges  
(CFMETR)



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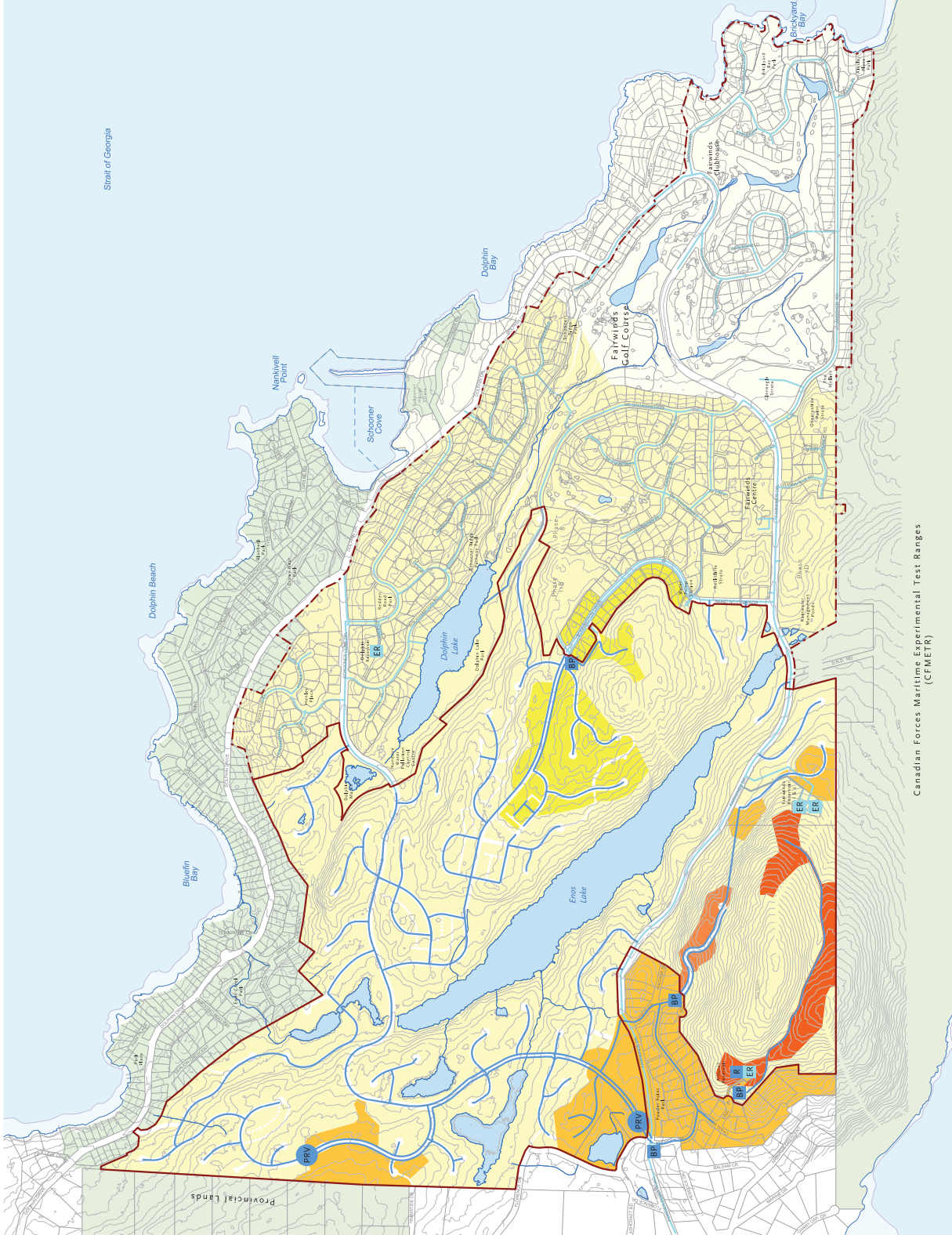
Schedule A4  
MASTER WATER  
CONCEPTUAL PLAN

JANUARY 2011

LEGEND

The Lakes District Neighbourhood Plan Area  
within OCP-designated Fairwinds Urban  
Containment Boundary

- Fairwinds Urban Containment Boundary
- 65m Hydraulic Grade Line
- 85m Hydraulic Grade Line
- 125m Hydraulic Grade Line
- 165m Hydraulic Grade Line, Booster Pump
- 165 Hydraulic Grade Line, Fire Pump
- 177m Hydraulic Grade Line
- 200m Hydraulic Grade Line, Fire Pump
- 250m Hydraulic Grade Line, Fire Pump
- Existing Water Main
- Existing Reservoir
- Proposed Water Main
- Proposed Reservoir
- Proposed Pressure Booster Pump
- Proposed Pressure Reducing Valve



Canadian Forces Maritime Experimental Test Ranges  
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Schedule A5  
MASTER DRAINAGE  
CONCEPTUAL PLAN

JANUARY 2011

LEGEND

-  OCP Urban Containment Boundary
-  The Lakes District Neighbourhood Plan Area within the OCP Urban Containment Boundary
-  Existing Drainage System
-  Catchment Areas
-  Hybrid Bioswale & Piped Rainwater Management System
-  Engineered Wetland Complex \*
-  Primary Sediment & Detention Ponds \*

\* Note: Additional rainwater management facilities and/or structures may be determined at the time of subdivision.



SCALE 1:12,500













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Schedule A6  
MASTER SANITARY  
CONCEPTUAL PLAN

JANUARY 2011

LEGEND

-  The Lakes District Neighbourhood Plan Area within OCP-designated Fairwinds Urban Containment Boundary
-  Fairwinds Urban Containment Boundary
-  Existing Gravity Sanitary Sewer
-  Existing Pumped Sanitary Sewer
-  Existing Sanitary Pump Station and Number
-  Existing Sanitary Treatment Facility
-  Existing Gravity Flow Sanitary Sewer Ocean Outfall
-  Gravity Sanitary Sewer
-  Pumped Sanitary Sewer
-  Sanitary Pump Station

\* Note: Exact location and number of sanitary pump stations will be determined at the time of installation.



Canadian Forces Maritime Experimental Test Ranges  
(CFMETR)



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Schedule A7  
DEVELOPMENT  
PERMIT AREAS

JANUARY 2011

LEGEND

-  OCP Urban Containment Boundary
-  The Lakes District Neighbourhood Plan Area within the OCP Urban Containment Boundary

-  DPA I: Form and Character
-  DPA II: Natural Environment
-  DPA III: Hazardous Conditions Steep Slopes
-  DPA IV: Hazardous Conditions Interface Fire Hazard
-  DPA V: Energy Conservation, Water Conservation and the Reduction of Greenhouse Gases

-  RDN Map - Environmental Polygons Sensitive Ecosystem Inventory 2004

SEI Polygons (2004) represent initial 1:30,000 scale coarse aerial interpretation. Areas were ground-truthed and updated to reflect current conditions. Surveyed carry over meadows and significant ESAs.

Refer to Appendix 1 - Section 2: Environmental Review for a detailed inventory.

The DPA II designation applies to lands within 30m of surveyed environmental features located within the Regional Park Boundary.



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SCALE 1:125,000



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